



Astrodienst Ephemeris Tables for the year 1423

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 1423

geocentric

JANUARY 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 14 23	19°37'56"	3°17'33"	7°46'46"	23°27'26"	23°8'5"	17°R 2	23°21'21"	19°43'43"	27°R28	27°R53	3°R39	4°R24	6°R7	4°R57	F 1
S 2	7 18 20	20° 9'01"	15°38'	8°52'	24°41'	23°14'	17°R 0	23°23'	19°45'	27°R26	27°R52	3°41'	4°21'	6°14'	5° 1'	S 2
S 3	7 22 17	21°10'05"	27°34'	9°51'	25°56'	23°25'	16°58'	23°25'	19°47'	27°25'	27°51'	3°42'	4°18'	6°21'	5° 6'	S 3
M 4	7 26 13	22°11'09"	9°25'	10°44'	27°11'	23°36'	16°56'	23°28'	19°49'	27°23'	27°50'	3°43'	4°14'	6°28'	5°10'	M 4
T 5	7 30 10	23°12'13"	21°18'	11°29'	28°25'	23°47'	16°54'	23°30'	19°51'	27°21'	27°49'	3°R43	4°11'	6°34'	5°15'	T 5
W 6	7 34 6	23°20'13"	3°15'	12° 4'	29°40'	23°59'	16°52'	23°32'	19°54'	27°20'	27°48'	3°43'	4° 8'	6°41'	5°19'	W 6
T 7	7 38 3	25°14'19"	15°23'	12°31'	0°55'	24°12'	16°49'	23°33'	19°56'	27°18'	27°47'	3°43'	4° 5'	6°48'	5°24'	T 7
F 8	7 41 59	26°15'22"	27°44'	12°47'	2°10'	24°25'	16°47'	23°35'	19°58'	27°16'	27°46'	3°42'	4° 2'	6°54'	5°29'	F 8
S 9	7 45 56	27°16'23"	10°24'	12°R52	3°24'	24°39'	16°44'	23°37'	20° 1'	27°15'	27°45'	3°41'	3°59'	7° 1'	5°33'	S 9
S 10	7 49 52	28°17'24"	23°24'	12°45'	4°39'	24°53'	16°41'	23°38'	20° 3'	27°13'	27°44'	3°40'	3°55'	7° 8'	5°38'	S 10
M 11	7 53 49	29°18'25"	6°46'	12°27'	5°54'	25° 8'	16°37'	23°40'	20° 5'	27°11'	27°42'	3°39'	3°52'	7°15'	5°42'	M 11
T 12	7 57 46	0°19'24"	20°29'	11°58'	7° 9'	25°23'	16°34'	23°41'	20° 8'	27° 9'	27°41'	3°39'	3°49'	7°21'	5°47'	T 12
W 13	8 1 42	1°20'23"	4°32'	11°19'	8°24'	25°39'	16°30'	23°42'	20°10'	27° 8'	27°40'	3°D39	3°46'	7°28'	5°52'	W 13
T 14	8 5 39	2°21'20"	18°49'	10°29'	9°38'	25°55'	16°26'	23°43'	20°13'	27° 6'	27°40'	3°39'	3°43'	7°35'	5°56'	T 14
F 15	8 9 35	3°22'16"	3°16'	9°31'	10°53'	26°12'	16°23'	23°44'	20°15'	27° 4'	27°39'	3°R39	3°40'	7°41'	6° 1'	F 15
S 16	8 13 32	4°23'11"	17°48'	8°27'	12° 8'	26°29'	16°18'	23°45'	20°18'	27° 3'	27°38'	3°39'	3°36'	7°48'	6° 6'	S 16
S 17	8 17 28	5°24'05"	2°18'	7°17'	13°23'	26°46'	16°14'	23°46'	20°21'	27° 1'	27°37'	3°39'	3°33'	7°55'	6°10'	S 17
M 18	8 21 25	6°24'57"	16°43'	6° 5'	14°38'	27° 4'	16°10'	23°47'	20°23'	26°59'	27°36'	3°39'	3°30'	8° 2'	6°15'	M 18
T 19	8 25 21	7°25'48"	0°58'	4°51'	15°52'	27°23'	16° 5'	23°47'	20°26'	26°58'	27°35'	3°D39	3°27'	8° 8'	6°20'	T 19
W 20	8 29 18	8°26'37"	15° 1'	3°40'	17° 7'	27°42'	16° 0'	23°48'	20°29'	26°56'	27°34'	3°39'	3°24'	8°15'	6°24'	W 20
T 21	8 33 15	9°27'24"	28°51'	2°31'	18°22'	28° 1'	15°55'	23°48'	20°32'	26°54'	27°33'	3°39'	3°20'	8°22'	6°29'	T 21
F 22	8 37 11	10°28'10"	12°27'	1°27'	19°37'	28°21'	15°50'	23°48'	20°34'	26°53'	27°32'	3°40'	3°17'	8°28'	6°34'	F 22
S 23	8 41 8	11°28'55"	25°49'	0°29'	20°52'	28°41'	15°45'	23°48'	20°37'	26°51'	27°31'	3°40'	3°14'	8°35'	6°38'	S 23
S 24	8 45 4	12°29'38"	8°58'	29°37'	22° 6'	29° 1'	15°39'	23°R49	20°40'	26°50'	27°31'	3°41'	3°11'	8°42'	6°43'	S 24
M 25	8 49 1	13°30'19"	21°53'	28°54'	23°21'	29°22'	15°34'	23°48'	20°43'	26°48'	27°30'	3°42'	3° 8'	8°48'	6°47'	M 25
T 26	8 52 57	14°30'59"	4°36'	28°18'	24°36'	29°43'	15°28'	23°48'	20°46'	26°46'	27°29'	3°R42	3° 5'	8°55'	6°52'	T 26
W 27	8 56 54	15°31'38"	17° 7'	27°50'	25°51'	0°11'	15°22'	23°48'	20°49'	26°45'	27°28'	3°42'	3° 1'	9° 2'	6°57'	W 27
T 28	9 0 50	16°32'15"	29°27'	27°31'	27° 5'	0°26'	15°16'	23°48'	20°52'	26°43'	27°27'	3°41'	2°58'	9° 9'	7° 1'	T 28
F 29	9 4 47	17°32'50"	11°17'	27°19'	28°20'	0°48'	15°10'	23°47'	20°55'	26°42'	27°27'	3°39'	2°55'	9°15'	7° 6'	F 29
S 30	9 8 44	18°33'24"	23°38'	27°D14	29°35'	1°11'	15° 4'	23°47'	20°58'	26°40'	27°26'	3°37'	2°52'	9°22'	7°10'	S 30
S 31	9 12 40	19°33'57"	5°33'	27°317	0°550	1°1134	14°58'	23°46'	21°11'	26°38'	27°R25	3°R34	2°R49	9°R29	7°R15	S 31

Delta T = 07m16s

Julian Calendar 1 Jan. 1423 == Greg. Calendar 10 Jan. 1423

FEBRUARY 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 16 37	20°34'28"	17°25'	27°326	2°44'	1°1157	14°R51	23°R45	21°R 4	26°R37	27°R25	3°R32	2°R46	9°R35	7°R19	M 1
T 2	9 20 33	21°34'58"	29°17'	27°42'	3°19'	2°20'	14°44'	23°44'	21° 7'	26°R35	27°R24	3°R29	2°42'	9°42'	7°24'	T 2
W 3	9 24 30	22°35'27"	11°13'	28° 3'	4°34'	2°44'	14°38'	23°43'	21°10'	26°34'	27°23'	3°R28	2°39'	9°49'	7°29'	W 3
T 4	9 28 26	23°35'54"	23°18'	28°30'	5°49'	3° 8'	14°31'	23°42'	21°13'	26°32'	27°23'	3°D28	2°36'	9°56'	7°33'	T 4
F 5	9 32 23	24°36'20"	5°36'	29° 2'	7° 3'	3°32'	14°24'	23°41'	21°16'	26°31'	27°22'	3°R28	2°33'	10° 2'	7°38'	F 5
S 6	9 36 19	25°36'45"	18°12'	29°38'	8°18'	3°56'	14°17'	23°40'	21°19'	26°30'	27°21'	3°R29	2°30'	10° 9'	7°42'	S 6
S 7	9 40 16	26°37'08"	1°10'	0°19'	9°33'	4°21'	14°10'	23°38'	21°23'	26°28'	27°21'	3°31'	2°26'	10°16'	7°46'	S 7
M 8	9 44 13	27°37'30"	14°33'	1° 4'	10°48'	4°46'	14° 3'	23°37'	21°26'	26°27'	27°20'	3°32'	2°23'	10°22'	7°51'	M 8
T 9	9 48 9	28°37'50"	28°22'	1°52'	12° 2'	5°11'	13°55'	23°35'	21°29'	26°25'	27°20'	3°R33	2°20'	10°29'	7°55'	T 9
W 10	9 52 6	29°38'08"	12°36'	2°44'	13°17'	5°37'	13°48'	23°34'	21°32'	26°24'	27°19'	3°33'	2°17'	10°36'	8° 0'	W 10
T 11	9 56 2	0°38'25"	27°12'	3°39'	14°32'	6° 2'	13°41'	23°32'	21°35'	26°23'	27°19'	3°31'	2°14'	10°43'	8° 4'	T 11
F 12	9 59 59	1°38'40"	12°R 3	4°37'	15°47'	6°28'	13°33'	23°30'	21°39'	26°21'	27°18'	3°39'	2°11'	10°49'	8° 8'	F 12
S 13	10 3 55	2°38'53"	27° 3'	5°37'	17° 1'	6°55'	13°26'	23°28'	21°42'	26°20'	27°18'	3°25'	2° 7'	10°56'	8°13'	S 13
S 14	10 7 52	3°39'04"	12°R 1	6°40'	18°16'	7°21'	13°18'	23°26'	21°45'	26°19'	27°18'	3°20'	2° 4'	11° 3'	8°17'	S 14
M 15	10 11 48	4°39'13"	26°49'	7°46'	19°31'	7°48'	13°11'	23°24'	21°49'	26°17'	27°17'	3°16'	2° 1'	11° 9'	8°21'	M 15
T 16	10 15 45	5°39'20"	11°R21	8°54'	20°45'	8°15'	13° 3'	23°21'	21°52'	26°16'	27°17'	3°13'	1°58'	11°16'	8°26'	T 16
W 17	10 19 41	6°39'25"	25°32'	10° 3'	22° 0'	8°42'	12°55'	23°19'	21°55'	26°15'	27°17'	3°11'	1°55'	11°23'	8°30'	W 17
T 18	10 23 38	7°39'28"	9°R21	11°15'	23°15'	9° 9'	12°47'	23°17'	21°59'	26°14'	27°16'	3°D10	1°52'	11°30'	8°34'	T 18
F 19	10 27 35	8°39'28"	22°49'	12°29'	24°29'	9°36'	12°40'	23°14'	22° 2'	26°13'	27°16'	3°11'	1°48'	11°36'	8°38'	F 19
S 20	10 31 31	9°39'27"	5°R56	13°45'	25°44'	10° 4'	12°32'	23°12'	22° 5'	26°12'	27°16'	3°12'	1°45'	11°43'	8°42'	S 20
S 21	10 35 28	10°39'23"	18°47'	15° 2'	26°59'	10°32'	12°24'	23° 9'	22° 9'	26°10'	27°15'	3°14'	1°42'	11°50'	8°46'	S 21
M 22	10 39 24	11°39'16"	1°R23	16°21'	28°13'	11° 0'	12°16'	23° 6'	22°12'	26° 9'	27°15'	3°R15	1°39'	11°56'	8°50'	M 22
T 23	10 43 21	12°39'08"	13°47'	17°41'	29°28'	11°28'	12° 8'	23° 3'	22°15'	26° 8'	27°15'	3°14'	1°36'	12° 3'	8°55'	T 23
W 24	10 47 17	13°38'58"	26° 2'	19° 3'	0°R43	11°57'	12° 1'	23° 0'	22°19'	26° 7'	27°15'	3°12'	1°32'	12°10'	8°59'	W 24
T 25	10 51 14	14°38'45"	8°R 9	20°27'	1°57'	12°25'	11°53'	22°57'	22°22'	26° 6'	27°15'	3° 7'	1°29'	12°17'	9° 3'	T 25
F 26	10 55 10	15°38'30"	20°10'	21°52'	3°12'	12°54'	11°45'	22°54'	22°26'	26° 5'	27°15'	3° 1'	1°26'	12°23'	9° 6'	F 26
S 27	10 59 7	16°38'14"	2°R 7	23°18'	4°26'	13°23'	11°37'	22°51'	22°29'	26° 4'	27°14'	2°53'	1°23'	12°30'	9°10'	S 27
S 28	11 3 4	17°37'55"	14°R 0	24°R46	5°R41	13°R52	11°R29	22°R48	22°R32	26°R 3	27°R14	2°R44	1°R20	12°R37	9°R14	S 28

Delta T = 07m16s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1423

geocentric

MARCH 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 7 0	18°37'35	25°52	26°15	6°55	14°21	11°R22	22°R44	22°36	26°R 2	27°R14	2°R35	1°R17	12°43	9°18	M 1
T 2	11 10 57	19°37'12	7°45	27°45	8°10	14°50	11°R14	22°44	22°39	26°R 2	27°R14	2°R27	1°13	12°50	9°22	T 2
W 3	11 14 53	20°36'48	19°41	29°17	9°24	15°20	11° 6	22°38	22°43	26° 1	27°D14	2°21	1°10	12°57	9°26	W 3
T 4	11 18 50	21°36'22	1°45	0°50	10°39	15°49	10°59	22°34	22°46	26° 0	27°14	2°17	1° 7	13° 4	9°29	T 4
F 5	11 22 46	22°35'55	14° 0	2°25	11°53	16°19	10°51	22°31	22°50	25°59	27°14	2°14	1° 4	13°10	9°33	F 5
S 6	11 26 43	23°35'25	26°31	4° 1	13° 8	16°49	10°44	22°27	22°53	25°58	27°14	2°D14	1° 1	13°17	9°37	S 6
S 7	11 30 39	24°34'54	9°23	5°38	14°22	17°19	10°36	22°23	22°56	25°58	27°14	2°15	0°57	13°24	9°40	S 7
M 8	11 34 36	25°34'21	22°39	7°16	15°37	17°49	10°29	22°19	23° 0	25°57	27°15	2°16	0°54	13°30	9°44	M 8
T 9	11 38 33	26°33'46	6°22	8°56	16°51	18°20	10°22	22°16	23° 3	25°56	27°15	2°R16	0°51	13°37	9°47	T 9
W10	11 42 29	27°33'10	20°34	10°37	18° 6	18°50	10°14	22°12	23° 7	25°56	27°15	2°15	0°48	13°44	9°51	W10
T 11	11 46 26	28°32'31	5°13	12°20	19°20	19°21	10° 7	22° 8	23°10	25°55	27°15	2°11	0°45	13°51	9°54	T 11
F 12	11 50 22	29°31'50	20°14	14° 3	20°35	19°51	10° 0	22° 4	23°14	25°54	27°15	2° 5	0°42	13°57	9°58	F 12
S 13	11 54 19	0°31'08	5°28	15°49	21°49	20°22	9°53	22° 0	23°17	25°54	27°15	1°57	0°38	14° 4	10° 1	S 13
S 14	11 58 15	1°30'23	20°45	17°35	23° 4	20°53	9°46	21°55	23°20	25°53	27°16	1°48	0°35	14°11	10° 4	S 14
M15	12 2 12	2°29'36	5°54	19°23	24°18	21°24	9°40	21°51	23°24	25°53	27°16	1°39	0°32	14°17	10° 8	M15
T 16	12 6 8	3°28'47	20°44	21°12	25°33	21°55	9°33	21°47	23°27	25°52	27°16	1°31	0°29	14°24	10°11	T 16
W17	12 10 5	4°27'56	5°11	23° 3	26°47	22°26	9°27	21°43	23°31	25°52	27°16	1°25	0°26	14°31	10°14	W17
T 18	12 14 2	5°27'02	19° 8	24°55	28° 1	22°58	9°20	21°39	23°34	25°52	27°17	1°22	0°23	14°38	10°17	T 18
F 19	12 17 58	6°26'06	2°39	26°48	29°16	23°29	9°14	21°34	23°37	25°51	27°17	1°D21	0°19	14°44	10°20	F 19
S 20	12 21 55	7°25'08	15°44	28°43	0°30	24° 1	9° 8	21°30	23°41	25°51	27°18	1°21	0°16	14°51	10°23	S 20
S 21	12 25 51	8°24'07	28°27	0°39	1°44	24°33	9° 2	21°26	23°44	25°51	27°18	1°R21	0°13	14°58	10°26	S 21
M22	12 29 48	9°23'04	10°54	2°37	2°59	25° 4	8°56	21°21	23°47	25°50	27°18	1°21	0°10	15° 5	10°29	M22
T 23	12 33 44	10°21'58	23° 7	4°36	4°13	25°36	8°50	21°17	23°51	25°50	27°19	1°19	0° 7	15°11	10°32	T 23
W24	12 37 41	11°20'51	5°11	6°36	5°27	26° 8	8°44	21°12	23°54	25°50	27°19	1°14	0° 3	15°18	10°35	W24
T 25	12 41 37	12°19'41	17° 9	8°38	6°41	26°40	8°39	21° 8	23°57	25°50	27°20	1° 7	0° 0	15°25	10°37	T 25
F 26	12 45 34	13°18'29	29° 3	10°41	7°56	27°12	8°33	21° 3	24° 1	25°50	27°20	0°56	29°57	15°31	10°40	F 26
S 27	12 49 30	14°17'15	10°56	12°44	9°10	27°45	8°28	20°59	24° 4	25°50	27°21	0°44	29°54	15°38	10°43	S 27
S 28	12 53 27	15°15'58	22°48	14°49	10°24	28°17	8°23	20°54	24° 7	25°50	27°21	0°30	29°51	15°45	10°45	S 28
M29	12 57 24	16°14'40	4°42	16°55	11°38	28°49	8°18	20°50	24°10	25°D50	27°22	0°17	29°48	15°52	10°48	M29
T 30	13 1 20	17°13'20	16°38	19° 1	12°53	29°22	8°13	20°45	24°14	25°50	27°23	0° 4	29°44	15°58	10°50	T 30
W31	13 5 17	18°11'59	28°39	21°38	14°37	29°54	8°11	20°41	24°17	25°50	27°23	29°54	29°41	16° 5	10°53	W31

Delta T = 07m16s

Julian Calendar 1 March 1423 == Greg. Calendar 10 March 1423

APRIL 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 9 13	19°10'35	10°47	23°15	15°21	0°27	8°R 4	20°R36	24°R20	25°50	27°R24	29°R46	29°38	16°12	10°55	T 1
F 2	13 13 10	20° 9'10	23° 4	25°22	16°35	1° 0	8°R 0	20°R32	24°23	25°50	27°24	29°41	29°35	16°18	10°58	F 2
S 3	13 17 6	21° 7'43	5°35	27°29	17°49	1°33	7°56	20°27	24°26	25°50	27°25	29°38	29°32	16°25	11° 0	S 3
S 4	13 21 3	22° 6'14	18°23	29°36	19° 3	2° 5	7°52	20°22	24°30	25°50	27°26	29°37	29°29	16°32	11° 2	S 4
M 5	13 24 59	23° 4'44	1°33	1°41	20°18	2°38	7°48	20°18	24°33	25°50	27°27	29°37	29°25	16°39	11° 4	M 5
T 6	13 28 56	24° 3'12	15° 7	3°45	21°32	3°11	7°44	20°13	24°36	25°51	27°27	29°37	29°22	16°45	11° 6	T 6
W 7	13 32 53	25° 1'38	29°10	5°48	22°46	3°44	7°41	20° 9	24°39	25°51	27°28	29°35	29°19	16°52	11° 8	W 7
T 8	13 36 49	26° 0'03	13°39	7°49	24° 0	4°18	7°38	20° 4	24°42	25°51	27°29	29°30	29°16	16°59	11°10	T 8
F 9	13 40 46	26°58'26	28°33	9°48	25°14	4°51	7°34	20° 0	24°45	25°52	27°30	29°23	29°13	17° 5	11°12	F 9
S 10	13 44 42	27°56'47	13°44	11°45	26°28	5°24	7°31	19°55	24°48	25°52	27°30	29°13	29° 9	17°12	11°14	S 10
S 11	13 48 39	28°55'07	29° 3	13°39	27°42	5°58	7°29	19°51	24°51	25°52	27°31	29° 2	29° 6	17°19	11°16	S 11
M12	13 52 35	29°53'25	14°18	15°30	28°56	6°31	7°26	19°46	24°54	25°53	27°32	28°51	29° 3	17°26	11°17	M12
T 13	13 56 32	0°51'41	29°17	17°17	0°10	7° 4	7°24	19°42	24°57	25°53	27°33	28°41	29° 0	17°32	11°19	T 13
W14	14 0 28	1°49'55	13°15	19° 2	1°24	7°38	7°21	19°37	25° 0	25°54	27°34	28°34	28°57	17°39	11°21	W14
T 15	14 4 25	2°48'07	28° 1	20°43	2°38	8°12	7°19	19°33	25° 3	25°54	27°35	28°29	28°54	17°46	11°22	T 15
F 16	14 8 22	3°46'17	11°40	22°20	3°52	8°45	7°18	19°28	25° 6	25°55	27°36	28°27	28°50	17°52	11°24	F 16
S 17	14 12 18	4°44'25	24°49	23°54	5° 6	9°19	7°16	19°24	25° 8	25°56	27°37	28°26	28°47	17°59	11°25	S 17
S 18	14 16 15	5°42'31	7°35	25°24	6°20	9°53	7°14	19°20	25°11	25°56	27°38	28°26	28°44	18° 6	11°27	S 18
M19	14 20 11	6°40'35	20° 0	26°49	7°34	10°27	7°13	19°16	25°14	25°57	27°39	28°25	28°41	18°13	11°28	M19
T 20	14 24 8	7°38'37	2°11	28°11	8°48	11° 1	7°12	19°11	25°17	25°58	27°40	28°23	28°38	18°19	11°29	T 20
W21	14 28 4	8°36'38	14°11	29°29	10° 2	11°35	7°11	19° 7	25°19	25°58	27°41	28°19	28°34	18°26	11°30	W21
T 22	14 32 1	9°34'36	26° 5	0°14	11°16	12° 9	7°10	19° 3	25°22	25°59	27°42	28°12	28°31	18°33	11°31	T 22
F 23	14 35 57	10°32'32	7°56	1°51	12°30	12°43	7°10	18°59	25°25	26° 0	27°43	28° 2	28°28	18°40	11°32	F 23
S 24	14 39 54	11°30'27	19°48	2°56	13°44	13°17	7° 9	18°55	25°27	26° 1	27°44	27°50	28°25	18°46	11°33	S 24
S 25	14 43 51	12°28'20	1°42	3°56	14°58	13°51	7° 9	18°51	25°30	26° 2	27°45	27°37	28°22	18°53	11°34	S 25
M26	14 47 47	13°26'12	13°40	4°52	16°11	14°26	7°D 9	18°47	25°33	26° 2	27°46	27°23	28°19	19° 0	11°35	M26
T 27	14 51 44	14°24'02	25°43	5°43	17°25	15° 0	7° 9	18°43	25°35	26° 3	27°47	27°11	28°15	19° 6	11°36	T 27
W28	14 55 40	15°21'50	7°52	6°30	18°39	15°34	7° 9	18°39	25°38	26° 4	27°48	27° 1	28°12	19°13	11°36	W28
T 29	14 59 37	16°19'38	20°10	7°12	19°53	16° 9	7°10	18°35	25°40	26° 5	27°49	26°53	28° 9	19°20	11°37	T 29
F 30	15 3 33	17°17'24	2°36	7°15	21°38	16°43	7°11	18°32	25°43	26° 6	27°51	26°48	28° 6	19°27	11°38	F 30

Delta T = 07m15s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1423

geocentric

MAY 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 7 30	18°15'09	15°31'15	8°11'23	22°18'21	17°18'18	7°11'11	18°18'28	25°14'45	26°12'07	27°11'52	26°18'46	28°12'03	19°12'33	11°11'38	S 1
S 2	15 11 26	19°12'52	28° 8	8°51	23°34	17°52	7°13	18°12'24	25°47	26° 8	27°53	26°18'45	28° 0	19°40	11°39	S 2
M 3	15 15 23	20°10'35	11°11'18	9°14	24°48	18°27	7°14	18°21	25°50	26°10	27°54	26°18'46	27°56	19°47	11°39	M 3
T 4	15 19 20	21° 8'16	24°50	9°32	26° 2	19° 1	7°15	18°17	25°52	26°11	27°55	26°18'46	27°53	19°53	11°39	T 4
W 5	15 23 16	22° 5'56	8°14'43	9°45	27°16	19°36	7°17	18°14	25°54	26°12	27°57	26°45	27°50	20° 0	11°40	W 5
T 6	15 27 13	23° 3'36	23° 0	9°54	28°30	20°11	7°19	18°11	25°56	26°13	27°58	26°41	27°47	20° 7	11°40	T 6
F 7	15 31 9	24° 1'14	7°13'38	9°18'58	29°43	20°46	7°20	18° 7	25°59	26°14	27°59	26°36	27°44	20°14	11°40	F 7
S 8	15 35 6	24°58'51	22°33	9°57	0°11'57	21°20	7°23	18° 4	26° 1	26°15	28° 0	26°28	27°40	20°20	11°18'40	S 8
S 9	15 39 2	25°56'27	7°18'37	9°52	2°11	21°55	7°25	18° 1	26° 3	26°17	28° 2	26°20	27°37	20°27	11°40	S 9
M10	15 42 59	26°54'02	22°40	9°42	3°25	22°30	7°27	17°58	26° 5	26°18	28° 3	26°11	27°34	20°34	11°40	M10
T 11	15 46 55	27°51'37	7°11'33	9°28	4°38	23° 5	7°30	17°55	26° 7	26°19	28° 4	26° 3	27°31	20°41	11°40	T 11
W12	15 50 52	28°49'09	22° 7	9°10	5°52	23°40	7°33	17°52	26° 9	26°21	28° 6	25°57	27°28	20°47	11°39	W12
T 13	15 54 49	29°46'41	6°11'17	8°49	7° 6	24°15	7°36	17°49	26°11	26°22	28° 7	25°53	27°25	20°54	11°39	T 13
F 14	15 58 45	0°11'44'12	19°59	8°25	8°20	24°51	7°39	17°47	26°13	26°23	28° 8	25°D51	27°21	21° 1	11°39	F 14
S 15	16 2 42	1°41'41	3°12'14	7°57	9°33	25°26	7°42	17°44	26°15	26°25	28°10	25°51	27°18	21° 7	11°38	S 15
S 16	16 6 38	2°39'09	16° 4	7°28	10°47	26° 1	7°46	17°41	26°16	26°26	28°11	25°52	27°15	21°14	11°38	S 16
M17	16 10 35	3°36'35	28°32	6°56	12° 1	26°36	7°49	17°39	26°18	26°28	28°12	25°R53	27°12	21°21	11°37	M17
T 18	16 14 31	4°34'00	10°11'45	6°23	13°14	27°11	7°53	17°36	26°20	26°29	28°14	25°53	27° 9	21°28	11°37	T 18
W19	16 18 28	5°31'24	22°45	5°50	14°28	27°47	7°57	17°34	26°22	26°31	28°15	25°51	27° 6	21°34	11°36	W19
T 20	16 22 24	6°28'47	4°12'40	5°16	15°42	28°22	8° 1	17°32	26°23	26°32	28°16	25°47	27° 2	21°41	11°35	T 20
F 21	16 26 21	7°26'09	16°31	4°43	16°55	28°58	8° 6	17°30	26°25	26°34	28°18	25°42	26°59	21°48	11°35	F 21
S 22	16 30 18	8°23'29	28°24	4°11	18° 9	29°33	8°10	17°28	26°26	26°36	28°19	25°34	26°56	21°55	11°34	S 22
S 23	16 34 14	9°20'49	10°11'22	3°41	19°22	0°12'08	8°15	17°26	26°28	26°37	28°21	25°26	26°53	22° 1	11°33	S 23
M24	16 38 11	10°18'08	22°26	3°12	20°36	0°44	8°19	17°24	26°29	26°39	28°22	25°18	26°50	22° 8	11°32	M24
T 25	16 42 7	11°15'26	4°17'38	2°46	21°50	1°20	8°24	17°22	26°31	26°40	28°23	25°10	26°46	22°15	11°31	T 25
W26	16 46 4	12°12'43	17° 0	2°23	23° 3	1°55	8°29	17°20	26°32	26°42	28°25	25° 4	26°43	22°21	11°30	W26
T 27	16 50 0	13°10'00	29°32	2° 4	24°17	2°31	8°35	17°19	26°34	26°44	28°26	24°59	26°40	22°28	11°29	T 27
F 28	16 53 57	14° 7'16	12°13'15	1°48	25°30	3° 6	8°40	17°17	26°35	26°46	28°28	24°56	26°37	22°35	11°27	F 28
S 29	16 57 53	15° 4'31	25°10	1°36	26°44	3°42	8°46	17°16	26°36	26°47	28°29	24°D56	26°34	22°42	11°26	S 29
S 30	17 1 50	16° 1'46	8°11'17	1°28	27°57	4°18	8°51	17°14	26°37	26°49	28°31	24°56	26°31	22°48	11°25	S 30
M31	17 5 47	16°11'59'01	21°11'39	1°D25	29°11'11	4°15'4	8°11'57	17°11'13	26°11'39	26°11'51	28°11'32	24°11'58	26°11'27	22°11'55	11°11'23	M31

Delta T = 07m15s

Julian Calendar 1 May 1423 == Greg. Calendar 10 May 1423

JUNE 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 9 43	17°11'56'15	5°11'16	1°11'26	0°12'25	5°12'30	9°11'03	17°18'12	26°11'40	26°12'53	28°11'34	24°12'59	26°12'24	23°12'02	11°18'22	T 1
W 2	17 13 40	18°53'30	19° 9	1°32	1°38	6° 5	9° 9	17°11'11	26°41	26°55	28°35	25°R 0	26°21	23° 8	11°18'20	W 2
T 3	17 17 36	19°50'43	3°11'18	1°42	2°52	6°41	9°15	17°10	26°42	26°56	28°36	24°59	26°18	23°15	11°19	T 3
F 4	17 21 33	20°47'57	17°41	1°57	4° 5	7°17	9°22	17° 9	26°43	26°58	28°38	24°57	26°15	23°22	11°17	F 4
S 5	17 25 29	21°45'11	2°11'15	2°17	5°19	7°53	9°28	17° 9	26°44	27° 0	28°39	24°53	26°12	23°29	11°15	S 5
S 6	17 29 26	22°42'25	16°55	2°41	6°32	8°29	9°35	17° 8	26°45	27° 2	28°41	24°49	26° 8	23°35	11°14	S 6
M 7	17 33 22	23°39'38	1°11'35	3°10	7°46	9° 5	9°42	17° 7	26°45	27° 4	28°42	24°44	26° 5	23°42	11°12	M 7
T 8	17 37 19	24°36'51	16° 7	3°44	8°59	9°41	9°48	17° 7	26°46	27° 6	28°44	24°40	26° 2	23°49	11°10	T 8
W 9	17 41 16	25°34'05	0°12'25	4°22	10°13	10°18	9°56	17° 7	26°47	27° 8	28°45	24°37	25°59	23°56	11° 8	W 9
T 10	17 45 12	26°31'17	14°24	5° 4	11°26	10°54	10° 3	17° 6	26°48	27°10	28°47	24°36	25°56	24° 2	11° 6	T 10
F 11	17 49 9	27°28'30	28° 1	5°51	12°40	11°30	10°10	17° 6	26°48	27°12	28°48	24°D35	25°52	24° 9	11° 4	F 11
S 12	17 53 5	28°25'42	11°12'15	6°43	13°53	12° 6	10°17	17°D 6	26°49	27°14	28°50	24°36	25°49	24°16	11° 2	S 12
S 13	17 57 2	29°22'54	24° 6	7°38	15° 7	12°43	10°25	17° 6	26°50	27°16	28°51	24°38	25°46	24°22	11° 0	S 13
M14	18 0 58	0°12'25'05	6°11'37	8°38	16°20	13°19	10°33	17° 6	26°50	27°18	28°53	24°39	25°43	24°29	10°58	M14
T 15	18 4 55	1°17'16	18°52	9°41	17°33	13°55	10°40	17° 6	26°50	27°20	28°54	24°40	25°40	24°36	10°56	T 15
W16	18 8 51	2°14'27	0°12'55	10°49	18°47	14°32	10°48	17° 7	26°51	27°22	28°56	24°R41	25°37	24°43	10°53	W16
T 17	18 12 48	3°11'37	12°51	12° 1	20° 0	15° 8	10°56	17° 7	26°51	27°24	28°57	24°41	25°33	24°49	10°51	T 17
F 18	18 16 45	4° 8'47	24°44	13°17	21°14	15°45	11° 5	17° 8	26°52	27°26	28°59	24°39	25°30	24°56	10°49	F 18
S 19	18 20 41	5° 5'57	6°11'39	14°37	22°27	16°21	11°13	17° 8	26°52	27°28	29° 0	24°37	25°27	25° 3	10°46	S 19
S 20	18 24 38	6° 3'07	18°39	16° 1	23°41	16°58	11°21	17° 9	26°52	27°30	29° 2	24°35	25°24	25°10	10°44	S 20
M21	18 28 34	7° 0'17	0°12'49	17°28	24°54	17°34	11°30	17°10	26°52	27°32	29° 3	24°32	25°21	25°16	10°42	M21
T 22	18 32 31	7°57'27	13°10	18°59	26° 7	18°11	11°38	17°11	26°52	27°34	29° 5	24°30	25°18	25°23	10°39	T 22
W23	18 36 27	8°54'37	25°44	20°34	27°21	18°47	11°47	17°12	26°52	27°36	29° 6	24°28	25°14	25°30	10°37	W23
T 24	18 40 24	9°51'47	8°13'33	22°13	28°34	19°24	11°56	17°13	26°R52	27°39	29° 7	24°26	25°11	25°36	10°34	T 24
F 25	18 44 20	10°48'57	21°36	23°55	29°47	20° 1	12° 5	17°14	26°52	27°41	29° 9	24°D26	25° 8	25°43	10°31	F 25
S 26	18 48 17	11°46'08	4°11'53	25°41	1°12'01	20°38	12°14	17°16	26°52	27°43	29°10	24°26	25° 5	25°50	10°29	S 26
S 27	18 52 14	12°43'19	18°24	27°29	2°14	21°14	12°23	17°17	26°52	27°45	29°12	24°27	25° 2	25°57	10°26	S 27
M28	18 56 10	13°40'30	2°11'37	29°21	3°27	21°51	12°32	17°19	26°52	27°47	29°13	24°28	24°58	26° 3	10°23	M28
T 29	19 0 7	14°37'42	16° 1	1°12'15	4°40	22°28	12°41	17°20	26°52	27°49	29°15	24°28	24°55	26°10	10°20	T 29
W30	19 4 3	15°34'55	0°11'3	3°12'12	5°12'54	23°12'05	12°11'51	17°11'22	26°11'51	27°11'52	29°11'16	24°11'29	24°11'52	26°11'17	10°11'18	W30

Delta T = 07m15s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1423
geocentric

JULY 1423 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 8 0	16 ³² 08	14 ¹¹ 13	5 ⁵² 12	7 ¹² 7	23 ¹² 42	13 ¹⁰ 0	17 ¹² 24	26 ¹⁵ R51	27 ⁵² 54	29 ¹¹ 18	24 ¹⁹ R29	24 ⁴⁹ 49	26 ¹² 23	10 ¹⁵ R15	T 1
F 2	19 11 56	17 ²⁹ 22	28 ²⁸ 28	7 ¹³ 13	8 ²⁰ 20	24 ¹⁹ 19	13 ¹⁰ 10	17 ²⁵ 25	26 ¹⁵ 51	27 ⁵⁶ 56	29 ¹⁹ 19	24 ⁴⁹ 29	24 ⁴⁶ 46	26 ³⁰ 30	10 ¹² 12	F 2
S 3	19 15 53	18 ²⁶ 37	12 ³⁸ 46	9 ¹⁷ 17	9 ³⁴ 34	24 ⁵⁶ 56	13 ²⁰ 20	17 ²⁷ 27	26 ⁵⁰ 50	27 ⁵⁸ 58	29 ²⁰ 20	24 ²⁹ 29	24 ⁴³ 43	26 ³⁷ 37	10 ⁹ 9	S 3
S 4	19 19 49	19 ²³ 53	27 ³ 3	11 ²¹ 21	10 ⁴⁷ 47	25 ³³ 33	13 ³⁰ 30	17 ³⁰ 30	26 ⁵⁰ 50	28 ⁰ 0	29 ²² 22	24 ²⁸ 28	24 ³⁹ 39	26 ⁴⁴ 44	10 ⁶ 6	S 4
M 5	19 23 46	20 ²¹ 10	11 ¹¹ 15	13 ²⁷ 27	12 ⁰ 0	26 ¹⁰ 10	13 ³⁹ 39	17 ³² 32	26 ⁴⁹ 49	28 ³ 3	29 ²³ 23	24 ²⁸ 28	24 ³⁶ 36	26 ⁵⁰ 50	10 ³ 3	M 5
T 6	19 27 43	21 ¹⁸ 27	25 ²⁰ 20	15 ³⁴ 34	13 ¹³ 13	26 ⁴⁷ 47	13 ⁴⁹ 49	17 ³⁴ 34	26 ⁴⁹ 49	28 ⁵ 5	29 ²⁵ 25	24 ²⁷ 27	24 ³³ 33	26 ⁵⁷ 57	10 ⁰ 0	T 6
W 7	19 31 39	22 ¹⁵ 45	9 ⁵² 13	17 ⁴¹ 41	14 ²⁶ 26	27 ²⁴ 24	14 ⁰ 0	17 ³⁶ 36	26 ⁴⁸ 48	28 ⁷ 7	29 ²⁶ 26	24 ²⁷ 27	24 ³⁰ 30	27 ⁴ 4	9 ⁵⁷ 57	W 7
T 8	19 35 36	23 ¹³ 04	22 ⁵² 52	19 ⁴⁸ 48	15 ⁴⁰ 40	28 ² 2	14 ¹⁰ 10	17 ³⁹ 39	26 ⁴⁸ 48	28 ⁹ 9	29 ²⁷ 27	24 ²⁷ 27	24 ²⁷ 27	27 ¹¹ 11	9 ⁵⁴ 54	T 8
F 9	19 39 32	24 ¹⁰ 24	6 ¹² 14	21 ⁵⁵ 55	16 ⁵³ 53	28 ³⁹ 39	14 ²⁰ 20	17 ⁴¹ 41	26 ⁴⁷ 47	28 ¹¹ 11	29 ²⁹ 29	24 ²⁷ 27	24 ²⁴ 24	27 ¹⁷ 17	9 ⁵¹ 51	F 9
S 10	19 43 29	25 ⁷ 44	19 ¹⁸ 18	24 ² 2	18 ⁶ 6	29 ¹⁶ 16	14 ³⁰ 30	17 ⁴⁴ 44	26 ⁴⁶ 46	28 ¹⁴ 14	29 ³⁰ 30	24 ²⁷ 27	24 ²⁰ 20	27 ²⁴ 24	9 ⁴⁸ 48	S 10
S 11	19 47 25	26 ⁵ 05	2 ¹⁰ 4	26 ⁹ 9	19 ¹⁹ 19	29 ⁵³ 53	14 ⁴¹ 41	17 ⁴⁷ 47	26 ⁴⁵ 45	28 ¹⁶ 16	29 ³² 32	24 ²⁷ 27	24 ¹⁷ 17	27 ³¹ 31	9 ⁴⁵ 45	S 11
M 12	19 51 22	27 ² 27	14 ³³ 33	28 ¹⁴ 14	20 ³² 32	0 ¹⁰ 31	14 ⁵¹ 51	17 ⁴⁹ 49	26 ⁴⁴ 44	28 ¹⁸ 18	29 ³³ 33	24 ²⁷ 27	24 ¹⁴ 14	27 ³⁷ 37	9 ⁴² 42	M 12
T 13	19 55 19	27 ⁵⁹ 49	26 ⁴⁸ 48	0 ¹⁹ 19	21 ⁴⁵ 45	1 ⁸ 8	15 ² 2	17 ⁵² 52	26 ⁴⁴ 44	28 ²⁰ 20	29 ³⁴ 34	24 ²⁶ 26	24 ¹¹ 11	27 ⁴⁴ 44	9 ³⁹ 39	T 13
W 14	19 59 15	28 ⁵⁷ 11	8 ¹⁵ 51	2 ²² 22	22 ⁵⁸ 58	1 ⁴⁶ 46	15 ¹² 12	17 ⁵⁵ 55	26 ⁴³ 43	28 ²³ 23	29 ³⁶ 36	24 ²⁶ 26	24 ⁸ 8	27 ⁵¹ 51	9 ³⁶ 36	W 14
T 15	20 3 12	29 ⁵⁴ 34	20 ⁴⁸ 48	4 ²⁵ 25	24 ¹² 12	2 ²³ 23	15 ²³ 23	17 ⁵⁸ 58	26 ⁴² 42	28 ²⁵ 25	29 ³⁷ 37	24 ²⁶ 26	24 ⁴ 4	27 ⁵⁸ 58	9 ³³ 33	T 15
F 16	20 7 8	0 ⁵¹ 58	2 ¹⁴ 41	6 ²⁶ 26	25 ²⁵ 25	3 ¹ 1	15 ³⁴ 34	18 ² 2	26 ⁴¹ 41	28 ²⁷ 27	29 ³⁸ 38	24 ²⁶ 26	24 ¹ 1	28 ⁴ 4	9 ²⁹ 29	F 16
S 17	20 11 5	1 ⁴⁹ 23	14 ³⁶ 36	8 ²⁵ 25	26 ³⁸ 38	3 ³⁸ 38	15 ⁴⁵ 45	18 ⁵ 5	26 ⁴⁰ 40	28 ²⁹ 29	29 ³⁹ 39	24 ²⁶ 26	23 ⁵⁸ 58	28 ¹¹ 11	9 ²⁶ 26	S 17
S 18	20 15 1	2 ⁴⁶ 48	26 ³⁸ 38	10 ²⁴ 24	27 ⁵¹ 51	4 ¹⁶ 16	15 ⁵⁶ 56	18 ⁸ 8	26 ³⁹ 39	28 ³¹ 31	29 ⁴¹ 41	24 ²⁶ 26	23 ⁵⁵ 55	28 ¹⁸ 18	9 ²³ 23	S 18
M 19	20 18 58	3 ⁴⁴ 14	8 ¹⁵ 50	12 ²⁰ 20	29 ⁴ 4	4 ⁵³ 53	16 ⁷ 7	18 ¹² 12	26 ³⁷ 37	28 ³⁴ 34	29 ⁴² 42	24 ²⁷ 27	23 ⁵² 52	28 ²⁵ 25	9 ²⁰ 20	M 19
T 20	20 22 54	4 ⁴¹ 41	21 ¹⁶ 16	14 ¹⁶ 16	0 ¹⁰ 17	5 ³¹ 31	16 ¹⁸ 18	18 ¹⁵ 15	26 ³⁶ 36	28 ³⁶ 36	29 ⁴³ 43	24 ²⁸ 28	23 ⁴⁹ 49	28 ³¹ 31	9 ¹⁷ 17	T 20
W 21	20 26 51	5 ³⁹ 09	3 ⁵⁹ 59	16 ⁹ 9	1 ³⁰ 30	6 ⁹ 9	16 ²⁹ 29	18 ¹⁹ 19	26 ³⁵ 35	28 ³⁸ 38	29 ⁴⁵ 45	24 ²⁹ 29	23 ⁴⁵ 45	28 ³⁸ 38	9 ¹⁴ 14	W 21
T 22	20 30 48	6 ³⁶ 38	17 ¹ 1	18 ¹ 1	2 ⁴³ 43	6 ⁴⁶ 46	16 ⁴⁰ 40	18 ²² 22	26 ³⁴ 34	28 ⁴⁰ 40	29 ⁴⁶ 46	24 ³⁰ 30	23 ⁴² 42	28 ⁴⁵ 45	9 ¹⁰ 10	T 22
F 23	20 34 44	7 ³⁴ 07	0 ²⁴ 24	19 ⁵² 52	3 ⁵⁶ 56	7 ²⁴ 24	16 ⁵² 52	18 ²⁶ 26	26 ³² 32	28 ⁴³ 43	29 ⁴⁷ 47	24 ³⁰ 30	23 ³⁹ 39	28 ⁵¹ 51	9 ⁷ 7	F 23
S 24	20 38 41	8 ³¹ 38	14 ⁵ 5	21 ⁴¹ 41	5 ⁸ 8	8 ² 2	17 ³ 3	18 ³⁰ 30	26 ³¹ 31	28 ⁴⁵ 45	29 ⁴⁸ 48	24 ²⁹ 29	23 ³⁶ 36	28 ⁵⁸ 58	9 ⁴ 4	S 24
S 25	20 42 37	9 ²⁹ 10	28 ² 2	23 ²⁹ 29	6 ²¹ 21	8 ⁴⁰ 40	17 ¹⁴ 14	18 ³⁴ 34	26 ³⁰ 30	28 ⁴⁷ 47	29 ⁴⁹ 49	24 ²⁸ 28	23 ³³ 33	29 ⁵ 5	9 ¹ 1	S 25
M 26	20 46 34	10 ²⁶ 43	12 ¹² 12	25 ¹⁵ 15	7 ³⁴ 34	9 ¹⁸ 18	17 ²⁶ 26	18 ³⁸ 38	26 ²⁸ 28	28 ⁴⁹ 49	29 ⁵¹ 51	24 ²⁶ 26	23 ²⁹ 29	29 ¹² 12	8 ⁵⁸ 58	M 26
T 27	20 50 30	11 ²⁴ 18	26 ³¹ 31	26 ⁵⁹ 59	8 ⁴⁷ 47	9 ⁵⁵ 55	17 ³⁷ 37	18 ⁴² 42	26 ²⁷ 27	28 ⁵¹ 51	29 ⁵² 52	24 ²⁴ 24	23 ²⁶ 26	29 ¹⁸ 18	8 ⁵⁴ 54	T 27
W 28	20 54 27	12 ²¹ 54	10 ¹⁵ 54	28 ⁴² 42	10 ⁰ 0	10 ³³ 33	17 ⁴⁹ 49	18 ⁴⁶ 46	26 ²⁵ 25	28 ⁵⁴ 54	29 ⁵³ 53	24 ²² 22	23 ²³ 23	29 ²⁵ 25	8 ⁵¹ 51	W 28
T 29	20 58 23	13 ¹⁹ 31	25 ¹⁶ 16	0 ¹⁰ 24	11 ¹³ 13	11 ¹¹ 11	18 ¹ 1	18 ⁵⁰ 50	26 ²⁴ 24	28 ⁵⁶ 56	29 ⁵⁴ 54	24 ²⁰ 20	23 ²⁰ 20	29 ³² 32	8 ⁴⁸ 48	T 29
F 30	21 2 20	14 ¹⁷ 10	9 ³³ 33	2 ⁴ 4	12 ²⁵ 25	11 ⁴⁹ 49	18 ¹² 12	18 ⁵⁴ 54	26 ²² 22	28 ⁵⁸ 58	29 ⁵⁵ 55	24 ²⁰ 20	23 ¹⁷ 17	29 ³⁸ 38	8 ⁴⁵ 45	F 30
S 31	21 6 17	15 ¹⁴ 51	23 ³⁸ 43	3 ¹⁰ 42	13 ¹⁰ 38	12 ¹⁰ 28	18 ¹⁰ 24	18 ⁵⁹ 59	26 ²¹ 21	29 ⁵⁹ 59	29 ⁵⁶ 56	24 ²⁰ 20	23 ¹⁴ 14	29 ⁴⁵ 45	8 ⁴² 42	S 31

Delta T = 07m15s

Julian Calendar 1 July 1423 == Greg. Calendar 10 July 1423

AUGUST 1423 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 10 13	16 ¹² 34	7 ¹¹ 44	5 ¹⁰ 20	14 ¹⁰ 51	13 ¹⁰ 6	18 ¹⁰ 36	19 ¹² 3	26 ¹⁵ R19	29 ⁵² 2	29 ¹¹ 57	24 ²⁰ 20	23 ¹⁰ 10	29 ¹² 52	8 ¹⁵ R15	S 1
M 2	21 14 10	17 ¹⁰ 18	21 ³⁴ 34	6 ⁵⁵ 55	16 ⁴ 4	13 ⁴⁴ 44	18 ⁴⁸ 48	19 ⁸ 8	26 ¹⁶ 16	29 ⁴ 4	29 ⁵⁸ 58	24 ²² 22	23 ⁷ 7	29 ⁵⁹ 59	8 ³⁵ 35	M 2
T 3	21 18 6	18 ⁸ 04	5 ⁵² 13	8 ²⁹ 29	17 ¹⁶ 16	14 ²² 22	19 ⁰ 0	19 ¹² 12	26 ¹⁶ 16	29 ⁶ 6	29 ⁵⁹ 59	24 ²³ 23	23 ⁴ 4	0 ¹¹ 5	8 ³² 32	T 3
W 4	21 22 3	19 ⁵ 51	18 ⁴⁰ 40	10 ² 2	18 ²⁹ 29	15 ⁰ 0	19 ¹² 12	19 ¹⁷ 17	26 ¹⁴ 14	29 ⁹ 9	0 ⁵² 1	24 ²⁴ 24	23 ¹ 1	0 ¹² 12	8 ²⁹ 29	W 4
T 5	21 25 59	20 ³ 40	1 ¹² 54	11 ³⁴ 34	19 ⁴² 42	15 ³⁹ 39	19 ²⁴ 24	19 ²² 22	26 ¹² 12	29 ¹¹ 11	0 ² 2	24 ²⁴ 24	22 ⁵⁸ 58	0 ¹⁹ 19	8 ²⁶ 26	T 5
F 6	21 29 56	21 ¹ 31	14 ⁵⁵ 55	13 ⁴ 4	20 ⁵⁴ 54	16 ¹⁷ 17	19 ³⁶ 36	19 ²⁷ 27	26 ¹⁰ 10	29 ¹³ 13	0 ³ 3	24 ²³ 23	22 ⁵⁵ 55	0 ²⁶ 26	8 ²³ 23	F 6
S 7	21 33 52	21 ⁵⁹ 23	27 ⁴³ 43	14 ³² 32	22 ⁷ 7	16 ⁵⁵ 55	19 ⁴⁸ 48	19 ³¹ 31	26 ⁸ 8	29 ¹⁵ 15	0 ⁴ 4	24 ²⁰ 20	22 ⁵¹ 51	0 ³² 32	8 ²⁰ 20	S 7
S 8	21 37 49	22 ⁵⁷ 16	10 ¹⁰ 18	15 ⁵⁹ 59	23 ¹⁹ 19	17 ³⁴ 34	20 ⁰ 0	19 ³⁶ 36	26 ⁶ 6	29 ¹⁷ 17	0 ⁵ 5	24 ¹⁶ 16	22 ⁴⁸ 48	0 ³⁹ 39	8 ¹⁷ 17	S 8
M 9	21 41 46	23 ⁵⁵ 11	22 ⁴⁰ 40	17 ²⁴ 24	24 ³² 32	18 ¹² 12	20 ¹³ 13	19 ⁴¹ 41	26 ⁴ 4	29 ¹⁹ 19	0 ⁶ 6	24 ¹¹ 11	22 ⁴⁵ 45	0 ⁴⁶ 46	8 ¹⁴ 14	M 9
T 10	21 45 42	24 ⁵³ 07	4 ¹⁵ 51	18 ⁴⁸ 48	25 ⁴⁵ 45	18 ⁵¹ 51	20 ²⁵ 25	19 ⁴⁶ 46	26 ³ 3	29 ²¹ 21	0 ⁶ 6	24 ⁶ 6	22 ⁴² 42	0 ⁵² 52	8 ¹¹ 11	T 10
W 11	21 49 39	25 ⁵¹ 05	16 ⁵² 52	20 ¹¹ 11	26 ⁵⁷ 57	19 ²⁹ 29	20 ³⁷ 37	19 ⁵² 52	26 ¹ 1	29 ²³ 23	0 ⁷ 7	24 ¹ 1	22 ³⁹ 39	0 ⁵⁹ 59	8 ⁸ 8	W 11
T 12	21 53 35	26 ⁴⁹ 04	28 ⁴⁷ 47	21 ³² 32	28 ¹⁰ 10	20 ⁸ 8	20 ⁵⁰ 50	19 ⁵⁷ 57	25 ⁵⁹ 59	29 ²⁵ 25	0 ⁸ 8	23 ⁵⁷ 57	22 ³⁵ 35	1 ⁶ 6	8 ⁵ 5	T 12
F 13	21 57 32	27 ⁴⁷ 05	10 ¹⁰ 39	22 ⁵¹ 51	29 ²² 22	20 ⁴⁶ 46	21 ² 2	20 ² 2	25 ⁵⁷ 57	29 ²⁷ 27	0 ⁹ 9	23 ⁵⁴ 54	22 ³² 32	1 ¹³ 13	8 ² 2	F 13
S 14	22 1 28	28 ⁴⁵ 07	22 ³³ 33	24 ⁸ 8	0 ¹² 34	21 ²⁵ 25	21 ¹⁴ 14	20 ⁷ 7	25 ⁵⁴ 54	29 ²⁹ 29	0 ¹⁰ 10	23 ⁵² 52	22 ²⁹ 29	1 ¹⁹ 19	7 ⁵⁹ 59	S 14
S 15	22 5 25	29 ⁴³ 10	4 ¹⁷ 32	25 ²⁴ 24	1 ⁴⁷ 22	22 ⁴ 4	21 ²⁷ 27	20 ¹³ 13	25 ⁵² 52	29 ³¹ 31	0 ¹¹ 11	23 ⁵² 52	22 ²⁶ 26	1 ²⁶ 26	7 ⁵⁶ 56	S 15
M 16	22 9 21	0 ¹⁰ 41 ¹⁵	16 ⁴² 42	26 ³⁸ 38	2 ⁵⁹ 59	22 ⁴² 42	21 ³⁹ 39	20 ¹⁸ 18	25 ⁵⁰ 50	29 ³³ 33	0 ¹² 12	23 ⁵³ 53	22 ²³ 23	1 ³³ 33	7 ⁵³ 53	M 16
T 17	22 13 18	1 ³⁹ 21	29 ⁸ 8	27 ⁵¹ 51	4 ¹¹ 11	23 ²¹ 21	21 ⁵² 52	20 ²⁴ 24	25 ⁴⁸ 48	29 ³⁵ 35	0 ¹³ 13	23 ⁵⁵ 55	22 ²⁰ 20	1 ³⁹ 39	7 ⁵⁰ 50	T 17
W 18	22 17 14	2 ³⁷ 29	11 ¹⁵ 53	29 ¹ 1	5 ²⁴ 24	24 ⁰ 0	22 ⁴ 4	20 ²⁹ 29	25 ⁴⁶ 46	29 ³⁷ 37	0 ¹³ 13	23 ⁵⁶ 56	22 ¹⁶ 16	1 ⁴⁶ 46	7 ⁴⁷ 47	W 18
T 19	22 21 11	3 ³⁵ 39	25 ² 2	0 ¹² 9	6 ³⁶ 36	24 ³⁹ 39	22 ¹⁷ 17	20 ³⁵ 35	25 ⁴⁴ 44	29 ³⁹ 39	0 ¹⁴ 14	23 ⁵⁷ 57	22 ¹³ 13	1 ⁵³ 53	7 ⁴⁵ 45	T 19
F 20	22 25 8	4 ³³ 49	8 ³⁶ 36	1 ¹⁵ 15	7 ⁴⁸ 48	25 ¹⁸ 18	22 ³⁰ 30	20 ⁴⁰ 40	25 ⁴² 42	29 ⁴¹ 41	0 ¹⁵ 15	23 ⁵⁶ 56	22 ¹⁰ 10	2 ⁰ 0	7 ⁴² 42	F 20
S 21	22 29 4	5 ³² 02	22 ³⁴ 34	2 ¹⁹ 19	9 ⁰ 0	25 ⁵⁷ 57	22 ⁴² 42	20 ⁴⁶ 46	25 ³⁹ 39	29 ⁴³ 43	0 ¹⁶ 16	23 ⁵³ 53	22 ⁷ 7	2 ⁶ 6	7 ³⁹ 39	S 21
S 22	22 33 1	6 ³⁰ 16	6 ¹⁶ 55	3 ²¹ 21	10 ¹³ 13	26 ³⁶ 36	22 ⁵⁵ 55	20 ⁵² 52	25 ³⁷ 37	29 ⁴⁵ 45	0 ¹⁶ 16	23 ⁴⁸ 48	22 ⁴ 4	2 ¹³ 13	7 ³⁷ 37	S 22
M 23	22 36 57	7 ²⁸ 32	21 ³² 32	4 ²⁰ 20	11 ²⁵ 25	27 ¹⁵ 15	23 ⁸ 8	20 ⁵⁸ 58	25 ³⁵ 35	29 ⁴⁷ 47	0 ¹⁷ 17	23 ⁴² 42	22 ¹ 1	2 ²⁰ 20	7 ³⁴ 34	M 23
T 24	22 40 54	8 ²⁶ 50	6 ¹⁹ 19	5 ¹⁷ 17	12 ³⁷ 37	27 ⁵⁴ 54	23 ²⁰ 20	21 ⁴ 4	25 ³³ 33	29 ⁴⁸ 48	0 ¹⁸ 18	23 ³⁵ 35	21 ⁵⁷ 57	2 ²⁷ 27	7 ³¹ 31	T 24
W 25	22 44 50	9 ²⁵ 10	21 ⁷ 7	6 ¹⁰ 10	13 ⁴⁹ 49	28 ³³ 33	23 ³³ 33	21 ¹⁰ 10	25 ³⁰ 30	29 ⁵⁰ 50	0 ¹⁸ 18	23 ²⁹ 29	21 ⁵⁴ 54	2 ³³ 33	7 ²⁹ 29	W 25
T 26	22 48 47	10 ²³ 31	5 ¹⁸ 50	7 ¹ 1	15 ¹ 1	29 ¹² 12	23 ⁴⁶ 46	21 ¹⁶ 16	25 ²⁸ 28	29 ⁵² 52	0 ¹⁹ 19	23 ²³ 23	21 ⁵¹ 51	2 ⁴⁰ 40	7 ²⁶ 26	T 26
F 27	22 52 43	11 ²¹ 56	20 ¹⁹ 19	7 ⁴⁸ 48	16 ¹³ 13	29 ⁵¹ 51	23 ⁵⁹ 59	21 ²² 22	25 ²⁶ 26	29 ⁵⁴ 54	0 ²⁰ 20	23 ¹⁹ 19	21 ⁴⁸ 48	2 ⁴⁷ 47	7 ²⁴ 24	F 27
S 28	22 56 40	12 ²⁰ 22	4 ¹¹ 33	8 ³² 32	17 ²⁵ 25	0 ¹² 30	24 ¹² 12	21 ²⁸ 28	25 ²³ 23	29 ⁵⁶ 56	0 ²⁰ 20	23 ¹⁷ 17	21 ⁴⁵ 45	2 ⁵³ 53	7 ²¹ 21	S 28
S 29	23 0 37	13 ¹⁸ 51	18 ²⁹ 29	9 ¹² 12	18 ³⁷ 37	1 ¹⁰ 10	24 ²⁴ 24	21 ³⁴ 34	25 ²¹ 21	29 ⁵⁷ 57	0 ²¹ 21	23 ¹⁷ 17	21 ⁴¹ 41	3 ⁰ 0	7 ¹⁹ 19	S 29
M 30	23 4 33	14 ¹⁷ 21	2 ¹⁸ 6	9 ⁴⁸ 48	19 ⁴⁸ 48	1 ⁴⁹ 49	24 ³⁷ 37	21 ⁴⁰ 40	25 ¹⁹ 19	29 ⁵⁹ 59	0 ²¹ 21	23 ¹⁸ 18	21 ³⁸ 38	3 ⁷ 7	7 ¹⁷ 17	M 30
T 31	23 8 30	15 ¹⁰ 54	15 ¹⁵ 27	10 ¹² 20	21 ¹² 0	2 ¹² 28	24 ¹⁰ 50	21 ¹² 46	25 ¹⁶ 16	0 ¹² 1	0 ¹² 22	23 ¹⁹ 19	21 ³⁵ 35	3 ¹⁴ 14	7 ¹⁴ 14	T 31

ASTRODIENST EPHEMERIS for the year 1423

geocentric

SEPTEMBER 1423 JC

00:00 UT

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

Delta T = 07m15s

Julian Calendar 1 Sept. 1423 == Greg. Calendar 10 Sept. 1423

OCTOBER 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 10 43	15 ⁴⁷ 24	3 ¹⁷ 36	27 ¹¹ 57	27 ¹¹ 43	23 ¹¹	1 ⁴²	25 ¹⁷	24 ¹³	0 ⁴¹	0 ²⁷	20 ¹⁹	19 ⁵⁷	6 ¹¹ 42	6 ¹³	F 1
S 2	1 14 39	16 ⁴⁷ 03	15 ⁵²	28 ⁴³	28 ⁵⁴	23 ⁵²	1 ⁴⁵	25 ²⁴	24 ¹¹	0 ⁴¹	0 ²⁷	20 ³¹	19 ⁵³	6 ⁴⁹	6 ³⁰	S 2
S 3	1 18 36	17 ⁴⁶ 44	28 ¹	29 ³⁶	0 ¹⁷ 4	24 ³³	1 ⁵⁷	25 ³¹	23 ⁵⁹	0 ⁴²	0 ²⁷	20 ¹⁹	19 ⁵⁰	6 ⁵⁵	6 ³⁰	S 3
M 4	1 22 32	18 ⁴⁶ 27	10 ³	0 ¹⁸ 37	1 ¹⁴	25 ¹⁴	2 ¹⁰	25 ³⁸	23 ⁵⁷	0 ⁴³	0 ²⁶	20 ⁵	19 ⁴⁷	7 ²	6 ³⁰	M 4
T 5	1 26 29	19 ⁴⁶ 12	22 ⁰	1 ⁴⁴	2 ²³	25 ⁵⁵	2 ²³	25 ⁴⁵	23 ⁵⁵	0 ⁴⁴	0 ²⁶	19 ⁵⁰	19 ⁴⁴	7 ⁹	6 ²⁹	T 5
W 6	1 30 26	20 ⁴⁵ 59	3 ¹¹ 54	2 ⁵⁶	3 ³³	26 ³⁶	2 ³⁵	25 ⁵³	23 ⁵²	0 ⁴⁴	0 ²⁶	19 ³⁶	19 ⁴¹	7 ¹⁵	6 ²⁹	W 6
T 7	1 34 22	21 ⁴⁵ 48	15 ⁴⁵	4 ¹⁴	4 ⁴³	27 ¹⁷	2 ⁴⁸	26 ⁰	23 ⁵⁰	0 ⁴⁵	0 ²⁵	19 ²²	19 ³⁸	7 ²²	6 ²⁹	T 7
F 8	1 38 19	22 ⁴⁵ 39	27 ³⁵	5 ³⁵	5 ⁵³	27 ⁵⁸	3 ¹	26 ⁷	23 ⁴⁸	0 ⁴⁶	0 ²⁵	19 ¹¹	19 ³⁴	7 ²⁹	6 ²⁹	F 8
S 9	1 42 15	23 ⁴⁵ 31	9 ¹⁷ 27	7 ⁰	7 ²	28 ⁴⁰	3 ¹³	26 ¹⁴	23 ⁴⁶	0 ⁴⁶	0 ²⁵	19 ³	19 ³¹	7 ³⁶	6 ²⁹	S 9
S 10	1 46 12	24 ⁴⁵ 26	21 ²³	8 ²⁸	8 ¹²	29 ²¹	3 ²⁶	26 ²¹	23 ⁴⁴	0 ⁴⁷	0 ²⁴	18 ⁵⁸	19 ²⁸	7 ⁴²	6 ²⁹	S 10
M11	1 50 8	25 ⁴⁵ 22	3 ²⁸	9 ⁵⁸	9 ²¹	0 ¹¹ 2	3 ³⁹	26 ²⁹	23 ⁴²	0 ⁴⁷	0 ²⁴	18 ⁵⁵	19 ²⁵	7 ⁴⁹	6 ²⁹	M11
T 12	1 54 5	26 ⁴⁵ 20	15 ⁴⁷	11 ³⁰	10 ³⁰	0 ⁴⁴	3 ⁵¹	26 ³⁶	23 ⁴⁰	0 ⁴⁸	0 ²³	18 ⁵⁵	19 ²²	7 ⁵⁶	6 ³⁰	T 12
W13	1 58 1	27 ⁴⁵ 20	28 ²³	13 ³	11 ³⁹	1 ²⁵	4 ³	26 ⁴³	23 ³⁹	0 ⁴⁸	0 ²³	18 ⁵⁵	19 ¹⁸	8 ²	6 ³⁰	W13
T 14	2 1 58	28 ⁴⁵ 21	11 ²³	14 ³⁸	12 ⁴⁸	2 ⁶	4 ¹⁶	26 ⁵⁰	23 ³⁷	0 ⁴⁹	0 ²³	18 ⁵⁴	19 ¹⁵	8 ⁹	6 ³⁰	T 14
F 15	2 5 55	29 ⁴⁵ 24	24 ⁵⁰	16 ¹⁴	13 ⁵⁷	2 ⁴⁸	4 ²⁸	26 ⁵⁷	23 ³⁵	0 ⁴⁹	0 ²²	18 ⁵²	19 ¹²	8 ¹⁶	6 ³¹	F 15
S 16	2 9 51	0 ¹¹ 45'28	8 ¹⁷ 46	17 ⁵¹	15 ⁶	3 ²⁹	4 ⁴¹	27 ⁵	23 ³³	0 ⁴⁹	0 ²²	18 ⁴⁸	19 ⁹	8 ²³	6 ³¹	S 16
S 17	2 13 48	1 ⁴⁵ 34	23 ¹³	19 ²⁹	16 ¹⁵	4 ¹¹	4 ⁵³	27 ¹²	23 ³¹	0 ⁵⁰	0 ²¹	18 ⁴¹	19 ⁶	8 ²⁹	6 ³²	S 17
M18	2 17 44	2 ⁴⁵ 42	8 ¹⁷ 6	21 ⁶	17 ²³	4 ⁵³	5 ⁵	27 ¹⁹	23 ³⁰	0 ⁵⁰	0 ²⁰	18 ³¹	19 ³	8 ³⁶	6 ³³	M18
T 19	2 21 41	3 ⁴⁵ 51	23 ¹⁹	22 ⁴⁴	18 ³²	5 ³⁴	5 ¹⁷	27 ²⁶	23 ²⁸	0 ⁵⁰	0 ²⁰	18 ²⁰	18 ⁵⁹	8 ⁴³	6 ³³	T 19
W20	2 25 37	4 ⁴⁶ 02	8 ¹⁸ 41	24 ²²	19 ⁴⁰	6 ¹⁶	5 ³⁰	27 ³³	23 ²⁶	0 ⁵¹	0 ¹⁹	18 ¹⁰	18 ⁵⁶	8 ⁴⁹	6 ³⁴	W20
T 21	2 29 34	5 ⁴⁶ 16	24 ⁰	26 ⁰	20 ⁴⁸	6 ⁵⁸	5 ⁴²	27 ⁴⁰	23 ²⁵	0 ⁵¹	0 ¹⁹	18 ⁰	18 ⁵³	8 ⁵⁶	6 ³⁵	T 21
F 22	2 33 30	6 ⁴⁶ 30	9 ¹¹ 4	27 ³⁹	21 ⁵⁶	7 ³⁹	5 ⁵⁴	27 ⁴⁸	23 ²³	0 ⁵¹	0 ¹⁸	17 ⁵³	18 ⁵⁰	9 ³	6 ³⁶	F 22
S 23	2 37 27	7 ⁴⁶ 47	23 ⁴⁷	29 ¹⁷	23 ⁴	8 ²¹	6 ⁶	27 ⁵⁵	23 ²²	0 ⁵¹	0 ¹⁷	17 ⁴⁸	18 ⁴⁷	9 ¹⁰	6 ³⁷	S 23
S 24	2 41 24	8 ⁴⁷ 06	8 ²⁵ 2	0 ¹¹ 55	24 ¹²	9 ³	6 ¹⁸	28 ²	23 ²⁰	0 ⁵¹	0 ¹⁷	17 ⁴⁶	18 ⁴³	9 ¹⁶	6 ³⁸	S 24
M25	2 45 20	9 ⁴⁷ 27	21 ⁴⁸	2 ³²	25 ¹⁹	9 ⁴⁵	6 ³⁰	28 ⁹	23 ¹⁹	0 ⁵¹	0 ¹⁶	17 ⁵⁰ 46	18 ⁴⁰	9 ²³	6 ³⁹	M25
T 26	2 49 17	10 ⁴⁷ 50	5 ¹⁰ 7	4 ¹⁰	26 ²⁷	10 ²⁷	6 ⁴¹	28 ¹⁶	23 ¹⁷	0 ⁵¹	0 ¹⁵	17 ⁴⁸ 46	18 ³⁷	9 ³⁰	6 ⁴⁰	T 26
W27	2 53 13	11 ⁴⁸ 15	18 ²	5 ⁴⁷	27 ³⁴	11 ⁹	6 ⁵³	28 ²³	23 ¹⁶	0 ⁵¹	0 ¹⁵	17 ⁴⁶	18 ³⁴	9 ³⁶	6 ⁴¹	W27
T 28	2 57 10	12 ⁴⁸ 42	0 ¹¹ 37	7 ²⁴	28 ⁴¹	11 ⁵¹	7 ⁵	28 ³⁰	23 ¹⁵	0 ⁵¹	0 ¹⁴	17 ⁴⁴	18 ³¹	9 ⁴³	6 ⁴³	T 28
F 29	3 1 6	13 ⁴⁹ 10	12 ⁵⁷	9 ¹	29 ⁴⁸	12 ³⁴	7 ¹⁷	28 ³⁷	23 ¹³	0 ⁵¹	0 ¹³	17 ⁴⁰	18 ²⁸	9 ⁵⁰	6 ⁴⁴	F 29
S 30	3 5 3	14 ⁴⁹ 41	25 ⁶	10 ³⁷	0 ¹³ 55	13 ¹⁶	7 ²⁸	28 ⁴⁴	23 ¹²	0 ⁵¹	0 ¹²	17 ³⁴	18 ²⁴	9 ⁵⁷	6 ⁴⁵	S 30
S 31	3 8 59	15 ⁵⁰ 13	7 ¹⁵ 6	12 ¹¹ 14	2 ³ 1	13 ¹¹ 58	7 ¹⁰ 40	28 ¹⁵ 51	23 ¹¹ 11	0 ¹⁰ 51	0 ¹¹ 11	17 ²⁴ 24	18 ²¹ 21	10 ¹¹ 3	6 ⁴⁷ 47	S 31

ASTRODIENST EPHEMERIS for the year 1423

geocentric

NOVEMBER 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 12 56	16 ¹¹ 50'47	19 ¹¹ 1	13 ¹¹ 50	3 ¹¹ 8	14 ¹¹ 40	7 ¹¹ 51	28 ¹¹ 58	23 ¹¹ R10	0 ¹¹ R50	0 ¹¹ R11	17 ¹¹ R13	18 ¹¹ 18	10 ¹¹ 10	6 ¹¹ 49	M 1
T 2	3 16 53	17 ¹¹ 51'23	0 ¹¹ 54	15 ¹¹ 25	4 ¹¹ 14	15 ¹¹ 23	8 ¹¹ 3	29 ¹¹ 5	23 ¹¹ 9	0 ¹¹ 50	0 ¹¹ 10	17 ¹¹ 1	18 ¹¹ 15	10 ¹¹ 17	6 ¹¹ 50	T 2
W 3	3 20 49	18 ¹¹ 52'00	12 ¹¹ 45	17 ¹¹ 1	5 ¹¹ 20	16 ¹¹ 5	8 ¹¹ 14	29 ¹¹ 12	23 ¹¹ 7	0 ¹¹ 50	0 ¹¹ 9	16 ¹¹ 49	18 ¹¹ 12	10 ¹¹ 23	6 ¹¹ 52	W 3
T 4	3 24 46	19 ¹¹ 52'39	24 ¹¹ 37	18 ¹¹ 36	6 ¹¹ 26	16 ¹¹ 48	8 ¹¹ 25	29 ¹¹ 19	23 ¹¹ 6	0 ¹¹ 50	0 ¹¹ 8	16 ¹¹ 38	18 ¹¹ 9	10 ¹¹ 30	6 ¹¹ 54	T 4
F 5	3 28 42	20 ¹¹ 53'19	6 ¹¹ 31	20 ¹¹ 11	7 ¹¹ 31	17 ¹¹ 30	8 ¹¹ 36	29 ¹¹ 26	23 ¹¹ 6	0 ¹¹ 49	0 ¹¹ 7	16 ¹¹ 29	18 ¹¹ 5	10 ¹¹ 37	6 ¹¹ 55	F 5
S 6	3 32 39	21 ¹¹ 54'01	18 ¹¹ 28	21 ¹¹ 46	8 ¹¹ 37	18 ¹¹ 13	8 ¹¹ 48	29 ¹¹ 33	23 ¹¹ 5	0 ¹¹ 49	0 ¹¹ 6	16 ¹¹ 23	18 ¹¹ 2	10 ¹¹ 44	6 ¹¹ 57	S 6
S 7	3 36 35	22 ¹¹ 54'44	0 ¹¹ 31	23 ¹¹ 21	9 ¹¹ 42	18 ¹¹ 55	8 ¹¹ 59	29 ¹¹ 40	23 ¹¹ 4	0 ¹¹ 49	0 ¹¹ 5	16 ¹¹ 19	17 ¹¹ 59	10 ¹¹ 50	6 ¹¹ 59	S 7
M 8	3 40 32	23 ¹¹ 55'28	12 ¹¹ 41	24 ¹¹ 56	10 ¹¹ 47	19 ¹¹ 38	9 ¹¹ 10	29 ¹¹ 47	23 ¹¹ 3	0 ¹¹ 48	0 ¹¹ 4	16 ¹¹ D17	17 ¹¹ 56	10 ¹¹ 57	7 ¹¹ 1	M 8
T 9	3 44 28	24 ¹¹ 56'13	25 ¹¹ 4	26 ¹¹ 30	11 ¹¹ 51	20 ¹¹ 21	9 ¹¹ 20	29 ¹¹ 53	23 ¹¹ 2	0 ¹¹ 48	0 ¹¹ 3	16 ¹¹ 18	17 ¹¹ 53	11 ¹¹ 4	7 ¹¹ 3	T 9
W10	3 48 25	25 ¹¹ 57'00	7 ¹¹ 41	28 ¹¹ 4	12 ¹¹ 56	21 ¹¹ 3	9 ¹¹ 31	0 ¹¹ 0	23 ¹¹ 1	0 ¹¹ 47	0 ¹¹ 2	16 ¹¹ 19	17 ¹¹ 49	11 ¹¹ 10	7 ¹¹ 5	W10
T 11	3 52 22	26 ¹¹ 57'47	20 ¹¹ 38	29 ¹¹ 39	14 ¹¹ 0	21 ¹¹ 46	9 ¹¹ 42	0 ¹¹ 7	23 ¹¹ 1	0 ¹¹ 47	0 ¹¹ 1	16 ¹¹ R20	17 ¹¹ 46	11 ¹¹ 17	7 ¹¹ 8	T 11
F 12	3 56 18	27 ¹¹ 58'36	3 ¹¹ 57	1 ¹¹ 13	15 ¹¹ 3	22 ¹¹ 29	9 ¹¹ 53	0 ¹¹ 14	23 ¹¹ 0	0 ¹¹ 46	0 ¹¹ 0	16 ¹¹ 20	17 ¹¹ 43	11 ¹¹ 24	7 ¹¹ 10	F 12
S 13	4 0 15	28 ¹¹ 59'25	17 ¹¹ 43	2 ¹¹ 47	16 ¹¹ 7	23 ¹¹ 12	10 ¹¹ 3	0 ¹¹ 20	22 ¹¹ 59	0 ¹¹ 46	29 ¹¹ II59	16 ¹¹ 18	17 ¹¹ 40	11 ¹¹ 31	7 ¹¹ 12	S 13
S 14	4 4 11	0 ¹¹ 15	1 ¹¹ 55	4 ¹¹ 20	17 ¹¹ 10	23 ¹¹ 55	10 ¹¹ 14	0 ¹¹ 27	22 ¹¹ 59	0 ¹¹ 45	29 ¹¹ 58	16 ¹¹ 14	17 ¹¹ 37	11 ¹¹ 37	7 ¹¹ 14	S 14
M15	4 8 8	1 ¹¹ 1'06	16 ¹¹ 33	5 ¹¹ 54	18 ¹¹ 13	24 ¹¹ 38	10 ¹¹ 24	0 ¹¹ 33	22 ¹¹ 58	0 ¹¹ 44	29 ¹¹ 57	16 ¹¹ 9	17 ¹¹ 34	11 ¹¹ 44	7 ¹¹ 17	M15
T 16	4 12 4	2 ¹¹ 1'58	1 ¹¹ 31	7 ¹¹ 28	19 ¹¹ 16	25 ¹¹ 21	10 ¹¹ 34	0 ¹¹ 40	22 ¹¹ 58	0 ¹¹ 44	29 ¹¹ 56	16 ¹¹ 2	17 ¹¹ 30	11 ¹¹ 51	7 ¹¹ 19	T 16
W17	4 16 1	3 ¹¹ 2'51	16 ¹¹ 43	9 ¹¹ 2	20 ¹¹ 18	26 ¹¹ 4	10 ¹¹ 45	0 ¹¹ 46	22 ¹¹ 58	0 ¹¹ 43	29 ¹¹ 55	15 ¹¹ 55	17 ¹¹ 27	11 ¹¹ 57	7 ¹¹ 22	W17
T 18	4 19 57	4 ¹¹ 3'45	1 ¹¹ 57	10 ¹¹ 35	21 ¹¹ 20	26 ¹¹ 47	10 ¹¹ 55	0 ¹¹ 53	22 ¹¹ 57	0 ¹¹ 42	29 ¹¹ 54	15 ¹¹ 49	17 ¹¹ 24	12 ¹¹ 4	7 ¹¹ 24	T 18
F 19	4 23 54	5 ¹¹ 4'40	17 ¹¹ 3	12 ¹¹ 9	22 ¹¹ 21	27 ¹¹ 30	11 ¹¹ 5	0 ¹¹ 59	22 ¹¹ 57	0 ¹¹ 41	29 ¹¹ 53	15 ¹¹ 44	17 ¹¹ 21	12 ¹¹ 11	7 ¹¹ 27	F 19
S 20	4 27 51	6 ¹¹ 5'36	1 ¹¹ 53	13 ¹¹ 43	23 ¹¹ 22	28 ¹¹ 14	11 ¹¹ 15	1 ¹¹ 6	22 ¹¹ 57	0 ¹¹ 41	29 ¹¹ 52	15 ¹¹ 42	17 ¹¹ 18	12 ¹¹ 18	7 ¹¹ 30	S 20
S 21	4 31 47	7 ¹¹ 6'34	16 ¹¹ 18	15 ¹¹ 16	24 ¹¹ 23	28 ¹¹ 57	11 ¹¹ 24	1 ¹¹ 12	22 ¹¹ 57	0 ¹¹ 40	29 ¹¹ 51	15 ¹¹ D41	17 ¹¹ 15	12 ¹¹ 24	7 ¹¹ 32	S 21
M22	4 35 44	8 ¹¹ 7'32	0 ¹¹ 15	16 ¹¹ 50	25 ¹¹ 23	29 ¹¹ 40	11 ¹¹ 34	1 ¹¹ 18	22 ¹¹ 56	0 ¹¹ 39	29 ¹¹ 50	15 ¹¹ 42	17 ¹¹ 11	12 ¹¹ 31	7 ¹¹ 35	M22
T 23	4 39 40	9 ¹¹ 8'31	13 ¹¹ 44	18 ¹¹ 24	26 ¹¹ 23	0 ¹¹ 23	11 ¹¹ 44	1 ¹¹ 24	22 ¹¹ 56	0 ¹¹ 38	29 ¹¹ 49	15 ¹¹ 43	17 ¹¹ 8	12 ¹¹ 38	7 ¹¹ 38	T 23
W24	4 43 37	10 ¹¹ 9'32	26 ¹¹ 47	19 ¹¹ 57	27 ¹¹ 23	1 ¹¹ 7	11 ¹¹ 53	1 ¹¹ 31	22 ¹¹ D56	0 ¹¹ 37	29 ¹¹ 47	15 ¹¹ 45	17 ¹¹ 5	12 ¹¹ 44	7 ¹¹ 41	W24
T 25	4 47 33	11 ¹¹ 10'34	9 ¹¹ 27	21 ¹¹ 31	28 ¹¹ 22	1 ¹¹ 50	12 ¹¹ 3	1 ¹¹ 37	22 ¹¹ 56	0 ¹¹ 36	29 ¹¹ 46	15 ¹¹ R46	17 ¹¹ 2	12 ¹¹ 51	7 ¹¹ 44	T 25
F 26	4 51 30	12 ¹¹ 11'37	21 ¹¹ 48	23 ¹¹ 4	29 ¹¹ 20	2 ¹¹ 34	12 ¹¹ 12	1 ¹¹ 43	22 ¹¹ 56	0 ¹¹ 35	29 ¹¹ 45	15 ¹¹ 45	16 ¹¹ 59	12 ¹¹ 58	7 ¹¹ 47	F 26
S 27	4 55 26	13 ¹¹ 12'40	3 ¹¹ 55	24 ¹¹ 38	0 ¹¹ 19	3 ¹¹ 17	12 ¹¹ 21	1 ¹¹ 49	22 ¹¹ 57	0 ¹¹ 34	29 ¹¹ 44	15 ¹¹ 43	16 ¹¹ 55	13 ¹¹ 5	7 ¹¹ 50	S 27
S 28	4 59 23	14 ¹¹ 13'45	15 ¹¹ 53	26 ¹¹ 11	1 ¹¹ 16	4 ¹¹ 1	12 ¹¹ 30	1 ¹¹ 55	22 ¹¹ 57	0 ¹¹ 33	29 ¹¹ 43	15 ¹¹ 39	16 ¹¹ 52	13 ¹¹ 11	7 ¹¹ 53	S 28
M29	5 3 20	15 ¹¹ 14'51	27 ¹¹ 46	27 ¹¹ 45	2 ¹¹ 13	4 ¹¹ 45	12 ¹¹ 39	2 ¹¹ 1	22 ¹¹ 57	0 ¹¹ 32	29 ¹¹ 42	15 ¹¹ 35	16 ¹¹ 49	13 ¹¹ 18	7 ¹¹ 56	M29
T 30	5 7 16	16 ¹¹ 15'57	9 ¹¹ 36	29 ¹¹ 18	3 ¹¹ 10	5 ¹¹ 28	12 ¹¹ 48	2 ¹¹ 6	22 ¹¹ 57	0 ¹¹ 31	29 ¹¹ II40	15 ¹¹ 32	16 ¹¹ 46	13 ¹¹ 25	7 ¹¹ 59	T 30

Delta T = 07m14s

Julian Calendar 1 Nov. 1423 == Greg. Calendar 10 Nov. 1423

DECEMBER 1423 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	5 11 13	17 ¹¹ 17'05	21 ¹¹ 17	0 ¹¹ 51	4 ¹¹ 6	6 ¹¹ 12	12 ¹¹ 57	2 ¹¹ 12	22 ¹¹ 58	0 ¹¹ R30	29 ¹¹ R39	15 ¹¹ R24	16 ¹¹ 43	13 ¹¹ 31	8 ¹¹ 2	W 1
T 2	5 15 9	18 ¹¹ 18'13	3 ¹¹ 22	2 ¹¹ 23	5 ¹¹ 1	6 ¹¹ 56	13 ¹¹ 5	2 ¹¹ 18	22 ¹¹ 58	0 ¹¹ 29	29 ¹¹ II38	15 ¹¹ 19	16 ¹¹ 40	13 ¹¹ 38	8 ¹¹ 6	T 2
F 3	5 19 6	19 ¹¹ 19'22	15 ¹¹ 23	3 ¹¹ 56	5 ¹¹ 56	7 ¹¹ 40	13 ¹¹ 14	2 ¹¹ 24	22 ¹¹ 58	0 ¹¹ 28	29 ¹¹ 37	15 ¹¹ 15	16 ¹¹ 36	13 ¹¹ 45	8 ¹¹ 9	F 3
S 4	5 23 2	20 ¹¹ 20'31	27 ¹¹ 29	5 ¹¹ 28	6 ¹¹ 50	8 ¹¹ 24	13 ¹¹ 22	2 ¹¹ 29	22 ¹¹ 59	0 ¹¹ 26	29 ¹¹ 36	15 ¹¹ 12	16 ¹¹ 33	13 ¹¹ 52	8 ¹¹ 12	S 4
S 5	5 26 59	21 ¹¹ 21'41	9 ¹¹ 35	6 ¹¹ 59	7 ¹¹ 44	9 ¹¹ 8	13 ¹¹ 30	2 ¹¹ 35	22 ¹¹ 59	0 ¹¹ 25	29 ¹¹ 34	15 ¹¹ D11	16 ¹¹ 30	13 ¹¹ 58	8 ¹¹ 16	S 5
M 6	5 30 55	22 ¹¹ 22'51	22 ¹¹ 10	8 ¹¹ 29	8 ¹¹ 36	9 ¹¹ 52	13 ¹¹ 38	2 ¹¹ 40	23 ¹¹ 0	0 ¹¹ 24	29 ¹¹ 33	15 ¹¹ 11	16 ¹¹ 27	14 ¹¹ 5	8 ¹¹ 19	M 6
T 7	5 34 52	23 ¹¹ 24'01	4 ¹¹ 46	9 ¹¹ 59	9 ¹¹ 28	10 ¹¹ 36	13 ¹¹ 46	2 ¹¹ 46	23 ¹¹ 1	0 ¹¹ 23	29 ¹¹ 32	15 ¹¹ 12	16 ¹¹ 24	14 ¹¹ 12	8 ¹¹ 23	T 7
W 8	5 38 49	24 ¹¹ 25'12	17 ¹¹ 35	11 ¹¹ 27	10 ¹¹ 20	11 ¹¹ 20	13 ¹¹ 54	2 ¹¹ 51	23 ¹¹ 1	0 ¹¹ 21	29 ¹¹ 31	15 ¹¹ 14	16 ¹¹ 21	14 ¹¹ 18	8 ¹¹ 26	W 8
T 9	5 42 45	25 ¹¹ 26'22	0 ¹¹ 40	12 ¹¹ 55	11 ¹¹ 10	12 ¹¹ 4	14 ¹¹ 2	2 ¹¹ 57	23 ¹¹ 2	0 ¹¹ 20	29 ¹¹ 30	15 ¹¹ 15	16 ¹¹ 17	14 ¹¹ 25	8 ¹¹ 30	T 9
F 10	5 46 42	26 ¹¹ 27'33	14 ¹¹ 1	14 ¹¹ 20	12 ¹¹ 0	12 ¹¹ 48	14 ¹¹ 10	3 ¹¹ 2	23 ¹¹ 3	0 ¹¹ 19	29 ¹¹ 28	15 ¹¹ 16	16 ¹¹ 14	14 ¹¹ 32	8 ¹¹ 33	F 10
S 11	5 50 38	27 ¹¹ 28'43	27 ¹¹ 42	15 ¹¹ 44	12 ¹¹ 49	13 ¹¹ 32	14 ¹¹ 17	3 ¹¹ 7	23 ¹¹ 4	0 ¹¹ 17	29 ¹¹ 27	15 ¹¹ R17	16 ¹¹ 11	14 ¹¹ 38	8 ¹¹ 37	S 11
S 12	5 54 35	28 ¹¹ 29'54	11 ¹¹ 41	17 ¹¹ 5	13 ¹¹ 37	14 ¹¹ 17	14 ¹¹ 24	3 ¹¹ 12	23 ¹¹ 5	0 ¹¹ 16	29 ¹¹ 26	15 ¹¹ 16	16 ¹¹ 8	14 ¹¹ 45	8 ¹¹ 41	S 12
M13	5 58 31	29 ¹¹ 31'04	26 ¹¹ 0	18 ¹¹ 24	14 ¹¹ 24	15 ¹¹ 1	14 ¹¹ 32	3 ¹¹ 17	23 ¹¹ 6	0 ¹¹ 15	29 ¹¹ 25	15 ¹¹ 15	16 ¹¹ 5	14 ¹¹ 52	8 ¹¹ 44	M13
T 14	6 2 28	0 ¹¹ 32'14	10 ¹¹ 35	19 ¹¹ 39	15 ¹¹ 10	15 ¹¹ 45	14 ¹¹ 39	3 ¹¹ 22	23 ¹¹ 7	0 ¹¹ 13	29 ¹¹ 23	15 ¹¹ 13	16 ¹¹ 1	14 ¹¹ 59	8 ¹¹ 48	T 14
W15	6 6 24	1 ¹¹ 33'24	25 ¹¹ 21	20 ¹¹ 51	15 ¹¹ 55	16 ¹¹ 30	14 ¹¹ 45	3 ¹¹ 27	23 ¹¹ 8	0 ¹¹ 12	29 ¹¹ 22	15 ¹¹ 12	15 ¹¹ 58	15 ¹¹ 5	8 ¹¹ 52	W15
T16	6 10 21	2 ¹¹ 34'34	10 ¹¹ II13	21 ¹¹ 58	16 ¹¹ 39	17 ¹¹ 14	14 ¹¹ 52	3 ¹¹ 32	23 ¹¹ 9	0 ¹¹ 10	29 ¹¹ 21	15 ¹¹ 10	15 ¹¹ 55	15 ¹¹ 12	8 ¹¹ 56	T16
F 17	6 14 18	3 ¹¹ 35'43	25 ¹¹ 2	23 ¹¹ 1	17 ¹¹ 22	17 ¹¹ 58	14 ¹¹ 59	3 ¹¹ 36	23 ¹¹ 10	0 ¹¹ 9	29 ¹¹ 20	15 ¹¹ 9	15 ¹¹ 52	15 ¹¹ 19	8 ¹¹ 59	F 17
S 18	6 18 14	4 ¹¹ 36'53	9 ¹¹ 240	23 ¹¹ 57	18 ¹¹ 4	18 ¹¹ 43	15 ¹¹ 5	3 ¹¹ 41	23 ¹¹ 11	0 ¹¹ 7	29 ¹¹ 19	15 ¹¹ D 8	15 ¹¹ 49	15 ¹¹ 25	9 ¹¹ 3	S 18
S 19	6 22 11	5 ¹¹ 38'03	24 ¹¹ 2	24 ¹¹ 47	18 ¹¹ 45	19 ¹¹ 27	15 ¹¹ 12	3 ¹¹ 46	23 ¹¹ 12	0 ¹¹ 6	29 ¹¹ 17	15 ¹¹ 8	15 ¹¹ 46	15 ¹¹ 32	9 ¹¹ 7	S 19
M20	6 26 7	6 ¹¹ 39'12	8 ¹¹ 1	25 ¹¹ 29	19 ¹¹ 25	20 ¹¹ 12	15 ¹¹ 18	3 ¹¹ 50	23 ¹¹ 14	0 ¹¹ 4	29 ¹¹ 16	15 ¹¹ 9	15 ¹¹ 42	15 ¹¹ 39	9 ¹¹ 11	M20
T 21	6 30 4	7 ¹¹ 40'22	21 ¹¹ 36	26 ¹¹ 3	20 ¹¹ 3	20 ¹¹ 57	15 ¹¹ 24	3 ¹¹ 55	23 ¹¹ 15	0 ¹¹ 3	29 ¹¹ 15	15 ¹¹ 10	15 ¹¹ 39	15 ¹¹ 46	9 ¹¹ 15	T 21
W22	6 34 0	8 ¹¹ 41'32	4 ¹¹ 46	26 ¹¹ 27	20 ¹¹ 40	21 ¹¹ 41	15 ¹¹ 30	3 ¹¹ 59	23 ¹¹ 16	0 ¹¹ 1	29 ¹¹ 14	15 ¹¹ 10	15 ¹¹ 36	15 ¹¹ 52	9 ¹¹ 19	W22
T 23	6 37 57	9 ¹¹ 42'41	17 ¹¹ 33	26 ¹¹ 41	21 ¹¹ 15	22 ¹¹ 26	15 ¹¹ 35	4 ¹¹ 3	23 ¹¹ 18	29 ¹¹ 259	29 ¹¹ 12	15 ¹¹ 11	15 ¹¹ 33	15 ¹¹ 59	9 ¹¹ 23	T 23
F 24	6 41 54	10 ¹¹ 43'51	29 ¹¹ 59	26 ¹¹ R45	21 ¹¹ 49	23 ¹¹ 11	15 ¹¹ 41	4 ¹¹ 8	23 ¹¹ 19	29 ¹¹ 58	29 ¹¹ 11	15 ¹¹ 11	15 ¹¹ 30	16 ¹¹ 6	9 ¹¹ 27	F 24
S 25	6 45 50	11 ¹¹ 45'00	12 ¹¹ 10	26 ¹¹ 37	22 ¹¹ 22	23 ¹¹ 56	15 ¹¹ 46	4 ¹¹ 12	23 ¹¹ 21	29 ¹¹ 57	29 ¹¹ 10	15 ¹¹ R11	15 ¹¹ 27	16 ¹¹ 12	9 ¹¹ 31	S 25
S 26	6 49 47	12 ¹¹ 46'10	24 ¹¹ 10	26 ¹¹ 17	22 ¹¹ 53	24 ¹¹ 40	15 ¹¹ 51	4 ¹¹ 16	23 ¹¹ 22	29 ¹¹ 55	29 ¹¹ 9	15 ¹¹ 11	15 ¹¹ 23	16 ¹¹ 19	9 ¹¹ 36	S 26
M27	6 53 43	13 ¹¹ 47'19	6 ¹¹ 12	25 ¹¹ 45	23 ¹¹ 23	25 ¹¹ 25	15 ¹¹ 57	4 ¹¹ 20	23 ¹¹ 24	29 ¹¹ 53	29 ¹¹ 8	15 ¹¹ 11	15 ¹¹ 20	16 ¹¹ 26	9 ¹¹ 40	M27
T 28	6 57 40	14 ¹¹ 48'28	17 ¹¹ 53	25 ¹¹ 2	23 ¹¹ 50	26 ¹¹ 10	16 ¹¹ 1	4 ¹¹ 23	23 ¹¹ 26	29 ¹¹ 52	29 ¹¹ 7	15 ¹¹ D11	15 ¹¹ 17	16 ¹¹ 32	9 ¹¹ 44	T 28
W29	7 1 36	15 ¹¹ 49'38	29 ¹¹ 45	24 ¹¹ 8	24 ¹¹ 17	26 ¹¹ 55	16 ¹¹ 6	4 ¹¹ 27	23 ¹¹ 27	29 ¹¹ 50	29 ¹¹ 5	15 ¹¹ 11	15 ¹¹ 14	16 ¹¹ 39	9 ¹¹ 48	W29
T 30	7 5 33	16 ¹¹ 50'46	11 ¹¹ 43	23 ¹¹ 6	24 ¹¹ 41	27 ¹¹ 40	16 ¹¹ 11	4 ¹¹ 31	23 ¹¹ 29	29 ¹¹ 49	29 ¹¹ 4	15 ¹¹ 11	15 ¹¹ 11	16 ¹¹ 46	9 ¹¹ 52	T 30
F 31	7 9 29	17 ¹¹ 51'55	23 ¹¹ 450	21 ¹¹ 56	25 ¹¹ 44	28 ¹¹ 425	16 ¹¹ 15	4 ¹¹ 135	23 ¹¹ 431	29 ¹¹ 247	29 ¹¹ II 3	15 ¹¹ 21	15 ¹¹ 27	16 ¹¹ 153	9 ¹¹ 56	F 31