



Astrodienst Ephemeris Tables for the year 1728

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 1728

geocentric

JANUARY 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 39 24	9°54'05	28°25'	20°33'	24°25'	17°21'	21°R53	13°18'	20°M58	6°R13	7°54	14°R32	15°H50	25°H41	12°V50	T 1
F 2	6 43 20	10°55'14	12°40'	20°13'	25°17'	17°34'	21°R50	13°24'	21°1	6°II12	7°55	14°D31	15°47'	25°48'	12°50'	F 2
S 3	6 47 17	11°56'24	26°53'	20°32'	26°9'	17°46'	21°47'	13°31'	21°4	6°11	7°55	14°H31	15°44'	25°55'	12°51'	S 3
S 4	6 51 13	12°57'33	10°59'	20°57'	27°2'	17°57'	21°44'	13°37'	21°7	6°10	7°55	14°R31	15°40'	26°1'	12°52'	S 4
M 5	6 55 10	13°58'43	25°0'	21°29'	27°55'	18°8'	21°42'	13°44'	21°9	6°8	7°55	14°31'	15°37'	26°8'	12°52'	M 5
T 6	6 59 6	14°59'53	8°M54	22°7'	28°49'	18°18'	21°39'	13°51'	21°12	6°7	7°56	14°28'	15°34'	26°15'	12°53'	T 6
W 7	7 3 3	16°1'03	22°40'	22°50'	29°44'	18°28'	21°37'	13°57'	21°14	6°6	7°56	14°23'	15°31'	26°21'	12°54'	W 7
T 8	7 7 0	17°2'13	6°X18	23°38'	0°X40	18°37'	21°36'	14°4'	21°17	6°5	7°56	14°16'	15°28'	26°28'	12°55'	T 8
F 9	7 10 56	18°3'23	19°45'	24°30'	1°36'	18°45'	21°34'	14°11'	21°19	6°3	7°56	14°6'	15°25'	26°35'	12°55'	F 9
S 10	7 14 53	19°4'33	3°30'	25°26'	2°33'	18°53'	21°32'	14°17'	21°22	6°2	7°56	13°56'	15°21'	26°41'	12°56'	S 10
S 11	7 18 49	20°5'42	16°2'	26°25'	3°30'	19°0'	21°31'	14°24'	21°24	6°1	7°R56	13°46'	15°18'	26°48'	12°57'	S 11
M 12	7 22 46	21°6'51	28°48'	27°27'	4°27'	19°7'	21°30'	14°31'	21°26	6°0	7°56	13°37'	15°15'	26°55'	12°58'	M 12
T 13	7 26 42	22°7'59	11°19'	28°32'	5°26'	19°13'	21°29'	14°38'	21°29	5°59	7°56	13°30'	15°12'	27°1'	12°59'	T 13
W 14	7 30 39	23°9'07	23°36'	29°39'	6°24'	19°18'	21°29'	14°45'	21°31	5°58	7°56	13°25'	15°9'	27°8'	13°1'	W 14
T 15	7 34 36	24°10'14	5°H40	0°349	7°23'	19°22'	21°28'	14°52'	21°33	5°57	7°56	13°23'	15°5'	27°14'	13°2'	T 15
F 16	7 38 32	25°11'20	17°34'	2°0'	8°23'	19°26'	21°D28	14°58'	21°35	5°56	7°56	13°D23	15°2'	27°21'	13°3'	F 16
S 17	7 42 29	26°12'25	29°22'	3°13'	9°23'	19°29'	21°28'	15°5'	21°37	5°55	7°55	13°24'	14°59'	27°28'	13°4'	S 17
S 18	7 46 25	27°13'30	11°V10	4°28'	10°23'	19°32'	21°28'	15°12'	21°39	5°54	7°55	13°25'	14°56'	27°34'	13°6'	S 18
M 19	7 50 22	28°14'33	23°1'	5°45'	11°24'	19°33'	21°29'	15°19'	21°41	5°53	7°55	13°R26	14°53'	27°41'	13°7'	M 19
T 20	7 54 18	29°15'35	5°8'	7°3'	12°25'	19°34'	21°30'	15°26'	21°43	5°52	7°54	13°26'	14°50'	27°48'	13°9'	T 20
W 21	7 58 15	0°16'37	17°16'	8°22'	13°27'	19°R35	21°30'	15°33'	21°45	5°51	7°54	13°25'	14°46'	27°54'	13°10'	W 21
T 22	8 2 11	1°17'37	29°50'	9°43'	14°29'	19°34'	21°31'	15°40'	21°47	5°50	7°54	13°21'	14°43'	28°1'	13°12'	T 22
F 23	8 6 8	2°18'37	12°II47	11°4'	15°31'	19°33'	21°33'	15°48'	21°49	5°50	7°53	13°16'	14°40'	28°8'	13°14'	F 23
S 24	8 10 5	3°19'35	26°9'	12°27'	16°34'	19°31'	21°34'	15°55'	21°51	5°49	7°53	13°9'	14°37'	28°14'	13°15'	S 24
S 25	8 14 1	4°20'32	9°56	13°51'	17°37'	19°28'	21°36'	16°2'	21°53	5°48	7°52	13°3'	14°34'	28°21'	13°17'	S 25
M 26	8 17 58	5°21'28	24°5'	15°15'	18°40'	19°24'	21°38'	16°9'	21°54	5°48	7°52	12°56'	14°31'	28°28'	13°19'	M 26
T 27	8 21 54	6°22'23	8°J33	16°41'	19°43'	19°20'	21°40'	16°16'	21°56	5°47	7°51	12°51'	14°27'	28°34'	13°21'	T 27
W 28	8 25 51	7°23'17	23°13'	18°8'	20°47'	19°15'	21°42'	16°23'	21°57	5°46	7°51	12°48'	14°24'	28°41'	13°22'	W 28
T 29	8 29 47	8°24'10	7°M58	19°35'	21°51'	19°9'	21°44'	16°30'	21°59	5°46	7°50	12°D47	14°21'	28°48'	13°24'	T 29
F 30	8 33 44	9°25'02	22°41'	21°3'	22°56'	19°2'	21°47'	16°37'	22°0	5°45	7°50	12°47'	14°18'	28°54'	13°26'	F 30
S 31	8 37 40	10°25'54	7°15	22°32	24°X1	18°M54	21°R50	16°45	22°M2	5°II45	7°15	12°H48	14°H15	29°H1	13°V28	S 31

Delta T = 10.93 sec

Greg. Calendar

FEBRUARY 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 41 37	11°26'44	21°38'	24°32'	25°X6	18°R46	21°R53	16°52'	22°M3	5°R44	7°R48	12°H50	14°H11	29°H7	13°V31	S 1
M 2	8 45 34	12°27'33	5°M45	25°33'	26°11'	18°M37	21°56'	16°59'	22°5	5°II44	7°47	12°51'	14°8'	29°14'	13°33'	M 2
T 3	8 49 30	13°28'22	19°37'	27°4'	27°16'	18°27'	22°0'	17°6'	22°6	5°43	7°47	12°R51	14°5'	29°21'	13°35'	T 3
W 4	8 53 27	14°29'10	3°X12	28°36'	28°22'	18°16'	22°3'	17°13'	22°7	5°43	7°46	12°50'	14°2'	29°27'	13°37'	W 4
T 5	8 57 23	15°29'56	16°33'	0°10	29°28'	18°5'	22°7'	17°21'	22°8	5°42	7°45	12°47'	13°59'	29°34'	13°39'	T 5
F 6	9 1 20	16°30'42	29°38'	1°43'	0°334	17°53'	22°11'	17°28'	22°9	5°42	7°44	12°43'	13°56'	29°41'	13°42'	F 6
S 7	9 5 16	17°31'27	12°30'	3°18'	1°40'	17°40'	22°15'	17°35'	22°10	5°42	7°43	12°39'	13°52'	29°47'	13°44'	S 7
S 8	9 9 13	18°32'10	25°10'	4°54'	2°47'	17°26'	22°20'	17°42'	22°11	5°41	7°42	12°35'	13°49'	29°54'	13°46'	S 8
M 9	9 13 9	19°32'52	7°36	6°30'	3°54'	17°11'	22°24'	17°49'	22°12	5°41	7°41	12°31'	13°46'	0°V1	13°49'	M 9
T 10	9 17 6	20°33'33	19°52'	8°7'	5°0'	16°56'	22°29'	17°57'	22°13	5°41	7°40	12°28'	13°43'	0°7	13°51'	T 10
W 11	9 21 3	21°34'12	1°H58	9°45'	6°7'	16°40'	22°34'	18°4'	22°14	5°41	7°39	12°27'	13°40'	0°14	13°54'	W 11
T 12	9 24 59	22°34'50	13°55'	11°24'	7°15'	16°23'	22°39'	18°11'	22°15	5°41	7°38	12°D26	13°37'	0°21	13°57'	T 12
F 13	9 28 56	23°35'26	25°46'	13°4'	8°22'	16°6'	22°44'	18°18'	22°16	5°41	7°37	12°27'	13°33'	0°27	13°59'	F 13
S 14	9 32 52	24°36'00	7°V33	14°44'	9°30'	15°48'	22°50'	18°26'	22°16	5°41	7°36	12°28'	13°30'	0°34	14°2'	S 14
S 15	9 36 49	25°36'33	19°21'	16°26'	10°37'	15°29'	22°55'	18°33'	22°17	5°D40	7°35	12°30'	13°27'	0°41	14°4'	S 15
M 16	9 40 45	26°37'04	1°B12	18°8'	11°45'	15°10'	23°1'	18°40'	22°18	5°40	7°34	12°31'	13°24'	0°47	14°7'	M 16
T 17	9 44 42	27°37'33	13°11'	19°52'	12°53'	14°51'	23°7'	18°47'	22°18	5°41	7°33	12°32'	13°21'	0°54	14°10'	T 17
W 18	9 48 38	28°38'01	25°24'	21°36'	14°1'	14°30'	23°13'	18°54'	22°18	5°41	7°32	12°R33	13°17'	1°1	14°13'	W 18
T 19	9 52 35	29°38'26	7°II53	23°21'	15°10'	14°9'	23°19'	19°1'	22°19	5°41	7°30	12°33'	13°14'	1°7	14°16'	T 19
F 20	9 56 32	0°H38'50	20°45'	25°7'	16°18'	13°48'	23°26'	19°8'	22°19	5°41	7°29	12°32'	13°11'	1°14	14°19'	F 20
S 21	10 0 28	1°39'11	4°2	26°54'	17°27'	13°27'	23°32'	19°16'	22°20	5°41	7°28	12°31'	13°8'	1°21	14°21'	S 21
S 22	10 4 25	2°39'31	17°46	28°42'	18°35'	13°5'	23°39'	19°23'	22°20	5°41	7°27	12°30'	13°5'	1°27	14°24'	S 22
M 23	10 8 21	3°39'49	1°L56	0°H32	19°44'	12°42'	23°46'	19°30'	22°20	5°41	7°25	12°29'	13°2'	1°34	14°27'	M 23
T 24	10 12 18	4°40'05	16°31'	2°22'	20°53'	12°19'	23°53'	19°37'	22°20	5°42	7°24	12°28'	12°58'	1°40	14°30'	T 24
W 25	10 16 14	5°40'18	1°M24	4°13'	22°2'	11°56'	24°0'	19°44'	22°20	5°42	7°23	12°27'	12°55'	1°47	14°33'	W 25
T 26	10 20 11	6°40'30	16°28'	6°5'	23°11'	11°33'	24°8'	19°51'	22°R20	5°42	7°21	12°D27	12°52'	1°54	14°37'	T 26
F 27	10 24 7	7°40'41	1°B34	7°57'	24°21'	11°10'	24°15'	19°58'	22°20	5°43	7°20	12°27'	12°49'	2°0	14°40'	F 27
S 28	10 28 4	8°40'49	16°34'	9°51'	25°30'	10°46'	24°23'	20°5'	22°20	5°43	7°19	12°28'	12°46'	2°7	14°43'	S 28
S 29	10 32 1	9°H40'56	1°M18	11°H46	26°339	10°M23	24°B30	20°12	22°M20	5°II44	7°17	12°H28	12°H43	2°V14	14°V46	S 29

Delta T = 10.94 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1728

geocentric

MARCH 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	10 35 57	10°41'02	15°43'	13°41'	27°49'	9°R59	24°38'	20°19'	22°R20	5°II44	7°R16	12°X28	12°X39	2°Y20	14°Y49	M 1
T 2	10 39 54	11°41'05	29°45'	15°37'	28°59'	9°M35	24°47'	20°26'	22°M19	5°45'	7°A14	12°28'	12°36'	2°27'	14°52'	T 2
W 3	10 43 50	12°41'08	13°47'	17°33'	0°8'	9°12'	24°55'	20°33'	22°19'	5°45'	7°13'	12°28'	12°33'	2°34'	14°56'	W 3
T 4	10 47 47	13°41'09	26°39'	19°30'	1°18'	8°48'	25°3'	20°39'	22°19'	5°46'	7°11'	12°28'	12°30'	2°40'	14°59'	T 4
F 5	10 51 43	14°41'08	9°35'	21°27'	2°28'	8°24'	25°12'	20°46'	22°18'	5°46'	7°10'	12°28'	12°27'	2°47'	15°2'	F 5
S 6	10 55 40	15°41'05	22°12'	23°25'	3°38'	8°1'	25°20'	20°53'	22°18'	5°47'	7°8'	12°29'	12°23'	2°54'	15°6'	S 6
S 7	10 59 36	16°41'01	4°35'	25°22'	4°48'	7°38'	25°29'	21°0'	22°17'	5°48'	7°7'	12°29'	12°20'	3°0'	15°9'	S 7
M 8	11 3 33	17°40'55	16°46'	27°18'	5°59'	7°15'	25°38'	21°7'	22°17'	5°49'	7°5'	12°30'	12°17'	3°7'	15°12'	M 8
T 9	11 7 30	18°40'47	28°48'	29°14'	7°9'	6°52'	25°47'	21°13'	22°16'	5°49'	7°4'	12°30'	12°14'	3°14'	15°16'	T 9
W10	11 11 26	19°40'37	10°43'	1°Y9	8°19'	6°30'	25°56'	21°20'	22°16'	5°50'	7°2'	12°R30	12°11'	3°20'	15°19'	W10
T 11	11 15 23	20°40'25	22°34'	3°3'	9°30'	6°8'	26°5'	21°26'	22°15'	5°51'	7°1'	12°30'	12°8'	3°27'	15°23'	T 11
F 12	11 19 19	21°40'12	4°Y22	4°54'	10°40'	5°47'	26°15'	21°33'	22°14'	5°52'	6°59'	12°30'	12°4'	3°34'	15°26'	F 12
S 13	11 23 16	22°39'56	16°10'	6°43'	11°51'	5°26'	26°24'	21°40'	22°13'	5°53'	6°57'	12°28'	12°1'	3°40'	15°30'	S 13
S 14	11 27 12	23°39'38	28°0'	8°30'	13°1'	5°5'	26°34'	21°46'	22°12'	5°54'	6°56'	12°27'	11°58'	3°47'	15°33'	S 14
M15	11 31 9	24°39'18	9°55'	10°14'	14°12'	4°45'	26°44'	21°53'	22°12'	5°54'	6°54'	12°25'	11°55'	3°54'	15°37'	M15
T 16	11 35 5	25°38'56	21°57'	11°53'	15°23'	4°26'	26°53'	21°59'	22°11'	5°55'	6°52'	12°23'	11°52'	4°0'	15°40'	T 16
W17	11 39 2	26°38'31	4°II10	13°29'	16°33'	4°7'	27°3'	22°5'	22°10'	5°56'	6°51'	12°22'	11°48'	4°7'	15°44'	W17
T 18	11 42 58	27°38'05	16°38'	15°0'	17°44'	3°49'	27°13'	22°12'	22°8'	5°57'	6°49'	12°21'	11°45'	4°14'	15°47'	T 18
F 19	11 46 55	28°37'36	29°25'	16°27'	18°55'	3°31'	27°24'	22°18'	22°7'	5°59'	6°48'	12°D20	11°42'	4°20'	15°51'	F 19
S 20	11 50 52	29°37'04	12°34'	17°47'	20°6'	3°14'	27°34'	22°24'	22°6'	6°0'	6°46'	12°21'	11°39'	4°27'	15°54'	S 20
S 21	11 54 48	0°Y36'31	26°7'	19°2'	21°17'	2°58'	27°44'	22°31'	22°5'	6°1'	6°44'	12°22'	11°36'	4°33'	15°58'	S 21
M22	11 58 45	1°35'55	10°8'	20°11'	22°28'	2°43'	27°55'	22°37'	22°4'	6°2'	6°43'	12°23'	11°33'	4°40'	16°2'	M22
T 23	12 2 41	2°35'16	24°34'	21°14'	23°39'	2°28'	28°5'	22°43'	22°2'	6°3'	6°41'	12°24'	11°29'	4°47'	16°5'	T 23
W24	12 6 38	3°34'36	9°M23	22°10'	24°50'	2°14'	28°16'	22°49'	22°1'	6°4'	6°39'	12°R25	11°26'	4°53'	16°9'	W24
T 25	12 10 34	4°33'53	24°29'	22°59'	26°2'	2°0'	28°27'	22°55'	22°0'	6°6'	6°38'	12°25'	11°23'	5°0'	16°13'	T 25
F 26	12 14 31	5°33'08	9°A44	23°41'	27°13'	1°48'	28°38'	23°1'	21°58'	6°7'	6°36'	12°23'	11°20'	5°7'	16°16'	F 26
S 27	12 18 27	6°32'21	24°57'	24°16'	28°24'	1°36'	28°49'	23°7'	21°57'	6°8'	6°34'	12°21'	11°17'	5°13'	16°20'	S 27
S 28	12 22 24	7°31'32	9°M59	24°43'	29°36'	1°25'	29°0'	23°13'	21°55'	6°9'	6°33'	12°17'	11°14'	5°20'	16°24'	S 28
M29	12 26 21	8°30'41	24°41'	25°3'	0°X47	1°15'	29°11'	23°18'	21°54'	6°11'	6°31'	12°14'	11°10'	5°27'	16°27'	M29
T 30	12 30 17	9°29'49	8°X58	25°17'	1°58'	1°5'	29°22'	23°24'	21°52'	6°12'	6°29'	12°10'	11°7'	5°33'	16°31'	T 30
W31	12 34 14	10°Y28'54	22°A46	25°R22	3°X10	0°M56	29°X33	23°X30	21°M50	6°II14	6°A28	12°X8	11°X4	5°Y40	16°Y35	W31

Delta T = 10.95 sec

Greg. Calendar

APRIL 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 38 10	11°Y27'58	6°3'	25°R21	4°X21	0°R48	29°X45	23°X36	21°R49	6°II15	6°R26	12°D7	11°X1	5°Y47	16°Y39	T 1
F 2	12 42 7	12°27'01	19°2'	25°Y14	5°33'	0°M41	29°56'	23°41'	21°M47	6°17'	6°A24	12°X7	10°58'	5°53'	16°42'	F 2
S 3	12 46 3	13°26'01	1°X35	25°0'	6°44'	0°35'	0°II8	23°47'	21°A45	6°18'	6°23'	12°8'	10°54'	6°0'	16°46'	S 3
S 4	12 50 0	14°25'00	13°51'	24°39'	7°56'	0°29'	0°20'	23°52'	21°44'	6°20'	6°21'	12°10'	10°51'	6°7'	16°50'	S 4
M 5	12 53 56	15°23'56	25°53'	24°14'	9°8'	0°24'	0°31'	23°57'	21°42'	6°21'	6°19'	12°11'	10°48'	6°13'	16°53'	M 5
T 6	12 57 53	16°22'51	7°X47	23°43'	10°19'	0°20'	0°43'	24°3'	21°40'	6°23'	6°18'	12°R12	10°45'	6°20'	16°57'	T 6
W 7	13 1 50	17°21'44	19°36'	23°9'	11°31'	0°17'	0°55'	24°8'	21°38'	6°24'	6°16'	12°12'	10°42'	6°27'	17°1'	W 7
T 8	13 5 46	18°20'35	1°Y23	22°30'	12°43'	0°14'	1°7'	24°13'	21°36'	6°26'	6°14'	12°10'	10°39'	6°33'	17°5'	T 8
F 9	13 9 43	19°19'25	13°11'	21°49'	13°55'	0°13'	1°19'	24°18'	21°34'	6°27'	6°13'	12°7'	10°35'	6°40'	17°8'	F 9
S 10	13 13 39	20°18'12	25°2'	21°7'	15°7'	0°12'	1°31'	24°24'	21°32'	6°29'	6°11'	12°1'	10°32'	6°47'	17°12'	S 10
S 11	13 17 36	21°16'57	6°X58	20°23'	16°18'	0°D11	1°43'	24°29'	21°30'	6°31'	6°9'	11°54'	10°29'	6°53'	17°16'	S 11
M12	13 21 32	22°15'40	19°0'	19°38'	17°30'	0°12'	1°56'	24°33'	21°28'	6°33'	6°8'	11°47'	10°26'	7°0'	17°20'	M12
T 13	13 25 29	23°14'22	1°II11	18°55'	18°42'	0°13'	2°8'	24°38'	21°26'	6°34'	6°6'	11°39'	10°23'	7°7'	17°23'	T 13
W14	13 29 25	24°13'01	13°32'	18°13'	19°54'	0°15'	2°20'	24°43'	21°24'	6°36'	6°5'	11°33'	10°20'	7°13'	17°27'	W14
T 15	13 33 22	25°11'38	26°5'	17°32'	21°6'	0°18'	2°33'	24°48'	21°22'	6°38'	6°3'	11°27'	10°16'	7°20'	17°31'	T 15
F 16	13 37 19	26°10'13	8°X53	16°55'	22°18'	0°21'	2°45'	24°53'	21°19'	6°40'	6°2'	11°24'	10°13'	7°27'	17°34'	F 16
S 17	13 41 15	27°8'45	21°59'	16°21'	23°30'	0°25'	2°58'	24°57'	21°17'	6°41'	6°0'	11°D22	10°10'	7°33'	17°38'	S 17
S 18	13 45 12	28°7'16	5°D25	15°50'	24°42'	0°30'	3°11'	25°2'	21°15'	6°43'	5°59'	11°22'	10°7'	7°40'	17°42'	S 18
M19	13 49 8	29°5'44	19°13'	15°24'	25°54'	0°35'	3°23'	25°6'	21°13'	6°45'	5°57'	11°23'	10°4'	7°47'	17°45'	M19
T 20	13 53 5	0°X4'10	3°M24	15°2'	27°6'	0°42'	3°36'	25°10'	21°10'	6°47'	5°56'	11°24'	10°0'	7°53'	17°49'	T 20
W21	13 57 1	1°2'34	17°58'	14°45'	28°18'	0°48'	3°49'	25°15'	21°8'	6°49'	5°54'	11°R24	9°57'	8°0'	17°53'	W21
T 22	14 0 58	2°0'55	2°A51	14°32'	29°30'	0°56'	4°2'	25°19'	21°6'	6°51'	5°53'	11°23'	9°54'	8°7'	17°56'	T 22
F 23	14 4 54	2°59'15	17°57'	14°25'	0°Y42	1°4'	4°14'	25°23'	21°4'	6°53'	5°51'	11°19'	9°51'	8°13'	18°0'	F 23
S 24	14 8 51	3°57'33	3°M7	14°D22	1°54'	1°12'	4°27'	25°27'	21°1'	6°55'	5°50'	11°13'	9°48'	8°20'	18°4'	S 24
S 25	14 12 48	4°55'49	18°10'	14°25'	3°7'	1°22'	4°40'	25°31'	20°59'	6°56'	5°48'	11°5'	9°45'	8°27'	18°7'	S 25
M26	14 16 44	5°54'03	2°X58	14°32'	4°19'	1°32'	4°53'	25°35'	20°56'	6°58'	5°47'	10°56'	9°41'	8°33'	18°11'	M26
T 27	14 20 41	6°52'16	17°23'	14°44'	5°31'	1°42'	5°6'	25°39'	20°54'	7°0'	5°46'	10°48'	9°38'	8°40'	18°14'	T 27
W28	14 24 37	7°50'27	1°Z0	15°1'	6°43'	1°53'	5°20'	25°43'	20°52'	7°2'	5°44'	10°42'	9°35'	8°47'	18°18'	W28
T 29	14 28 34	8°48'37	14°47'	15°22'	7°55'	2°4'	5°33'	25°46'	20°49'	7°4'	5°43'	10°37'	9°32'	8°53'	18°22'	T 29
F 30	14 32 30	9°46'45	27°Z47	15°Y48	9°Y8	2°M17	5°II46	25°X50	20°M47	7°II6	5°A42	10°X34	9°X29	9°Y0	18°Y25	F 30

Delta T = 10.96 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1728

geocentric

MAY 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 36 27	10♈44'52	10♈22	16♊17	10♊20	2♊29	5♊59	25♈53	20♊R44	7♊ 9	5♊R40	10♊D33	9♊26	9♊ 7	18♊29	S 1
S 2	14 40 23	11°42'57	22°38	16°51	11°32	2°42	6°13	25°57	20♊42	7°11	5♊39	10♊34	9°22	9°13	18°32	S 2
M 3	14 44 20	12°41'01	4♊39	17°29	12°45	2°56	6°26	26° 0	20°39	7°13	5°38	10°R35	9°19	9°20	18°36	M 3
T 4	14 48 17	13°39'04	16°30	18°11	13°57	3°10	6°39	26° 3	20°37	7°15	5°36	10°35	9°16	9°27	18°39	T 4
W 5	14 52 13	14°37'05	28°17	18°56	15° 9	3°25	6°53	26° 6	20°34	7°17	5°35	10°33	9°13	9°33	18°43	W 5
T 6	14 56 10	15°35'04	10♊ 4	19°45	16°22	3°40	7° 6	26° 9	20°32	7°19	5°34	10°29	9°10	9°40	18°46	T 6
F 7	15 0 6	16°33'02	21°55	20°37	17°34	3°56	7°20	26°12	20°29	7°21	5°33	10°22	9° 6	9°47	18°49	F 7
S 8	15 4 3	17°30'59	3♈51	21°33	18°46	4°12	7°33	26°15	20°27	7°23	5°32	10°13	9° 3	9°53	18°53	S 8
S 9	15 7 59	18°28'54	15°56	22°31	19°59	4°28	7°47	26°18	20°24	7°25	5°31	10° 2	9° 0	10° 0	18°56	S 9
M10	15 11 56	19°26'48	28°10	23°33	21°11	4°46	8° 0	26°21	20°22	7°27	5°29	9°50	8°57	10° 7	19° 0	M10
T 11	15 15 52	20°24'41	10♊35	24°37	22°24	5° 3	8°14	26°23	20°19	7°30	5°28	9°37	8°54	10°13	19° 3	T 11
W12	15 19 49	21°22'32	23°10	25°45	23°36	5°21	8°27	26°26	20°17	7°32	5°27	9°26	8°51	10°20	19° 6	W12
T 13	15 23 46	22°20'21	5♈56	26°55	24°49	5°39	8°41	26°28	20°14	7°34	5°26	9°17	8°47	10°27	19° 9	T 13
F 14	15 27 42	23°18'08	18°55	28° 8	26° 1	5°58	8°55	26°31	20°12	7°36	5°25	9°10	8°44	10°33	19°13	F 14
S 15	15 31 39	24°15'54	2♊ 7	29°23	27°14	6°17	9° 8	26°33	20° 9	7°38	5°24	9° 6	8°41	10°40	19°16	S 15
S 16	15 35 35	25°13'39	15°33	0♈41	28°26	6°37	9°22	26°35	20° 7	7°41	5°23	9° 4	8°38	10°47	19°19	S 16
M17	15 39 32	26°11'21	29°16	2° 2	29°39	6°57	9°36	26°37	20° 4	7°43	5°23	9°D 4	8°35	10°53	19°22	M17
T 18	15 43 28	27° 9'02	13♊17	3°25	0♈51	7°17	9°50	26°39	20° 2	7°45	5°22	9°R 4	8°31	11° 0	19°25	T 18
W19	15 47 25	28° 6'41	27°35	4°50	2° 4	7°38	10° 3	26°41	19°59	7°47	5°21	9° 3	8°28	11° 7	19°28	W19
T 20	15 51 21	29° 4'19	12♊ 9	6°18	3°16	7°59	10°17	26°43	19°57	7°49	5°20	9° 0	8°25	11°13	19°32	T 20
F 21	15 55 18	0♊ 1'55	26°54	7°49	4°29	8°21	10°31	26°44	19°54	7°52	5°19	8°54	8°22	11°20	19°35	F 21
S 22	15 59 15	0°59'30	11♊46	9°22	5°41	8°42	10°45	26°46	19°52	7°54	5°18	8°46	8°19	11°27	19°38	S 22
S 23	16 3 11	1°57'04	26°35	10°57	6°54	9° 5	10°58	26°47	19°49	7°56	5°18	8°36	8°16	11°33	19°41	S 23
M24	16 7 8	2°54'37	11♊13	12°34	8° 7	9°27	11°12	26°49	19°47	7°58	5°17	8°25	8°12	11°40	19°43	M24
T 25	16 11 4	3°52'08	25°32	14°14	9°19	9°50	11°26	26°50	19°45	8° 1	5°16	8°14	8° 9	11°47	19°46	T 25
W26	16 15 1	4°49'38	9♈27	15°57	10°32	10°13	11°40	26°51	19°42	8° 3	5°16	8° 4	8° 6	11°53	19°49	W26
T 27	16 18 57	5°47'08	22°56	17°41	11°44	10°37	11°54	26°52	19°40	8° 5	5°15	7°57	8° 3	12° 0	19°52	T 27
F 28	16 22 54	6°44'37	5♈58	19°28	12°57	11° 0	12° 8	26°53	19°37	8° 7	5°14	7°52	8° 0	12° 7	19°55	F 28
S 29	16 26 51	7°42'04	18°36	21°18	14°10	11°24	12°22	26°54	19°35	8°10	5°14	7°50	7°57	12°13	19°58	S 29
S 30	16 30 47	8°39'31	0♈53	23° 9	15°22	11°49	12°35	26°55	19°33	8°12	5°13	7°49	7°53	12°20	20° 0	S 30
M31	16 34 44	9♊36'58	12♈56	25♈ 3	16♈35	12♊13	12♊49	26°56	19♊30	8♊14	5♊13	7♈49	7♈50	12°Y27	20°Y 3	M31

Delta T = 10.97 sec

Greg. Calendar

JUNE 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 38 40	10♊34'23	24♈49	27♈ 0	17♈48	12♊38	13♊ 3	26°56	19°R28	8♊16	5°R12	7°R48	7♈47	12°Y33	20°Y 6	T 1
W 2	16 42 37	11°31'48	6♊37	28°58	19° 1	13° 4	13°17	26°57	19♊26	8°19	5♊12	7♈46	7°44	12°40	20° 8	W 2
T 3	16 46 33	12°29'12	18°26	0♊58	20°13	13°29	13°31	26°57	19°24	8°21	5°11	7°42	7°41	12°47	20°11	T 3
F 4	16 50 30	13°26'36	0♈21	3° 1	21°26	13°55	13°45	26°58	19°21	8°23	5°11	7°36	7°37	12°53	20°14	F 4
S 5	16 54 26	14°23'59	12°24	5° 5	22°39	14°21	13°59	26°58	19°19	8°25	5°11	7°26	7°34	13° 0	20°16	S 5
S 6	16 58 23	15°21'22	24°38	7°11	23°52	14°47	14°13	26°58	19°17	8°27	5°10	7°15	7°31	13° 7	20°19	S 6
M 7	17 2 19	16°18'43	7♊ 5	9°19	25° 5	15°14	14°27	26°58	19°15	8°30	5°10	7° 2	7°28	13°13	20°21	M 7
T 8	17 6 16	17°16'04	19°46	11°28	26°18	15°41	14°41	26°58	19°13	8°32	5°10	6°49	7°25	13°20	20°23	T 8
W 9	17 10 13	18°13'25	2♈40	13°38	27°30	16° 8	14°54	26°58	19°11	8°34	5°10	6°37	7°22	13°27	20°26	W 9
T 10	17 14 9	19°10'45	15°46	15°48	28°43	16°35	15° 8	26°57	19° 8	8°36	5°10	6°27	7°18	13°33	20°28	T 10
F 11	17 18 6	20° 8'04	29° 3	18° 0	29°56	17° 3	15°22	26°57	19° 6	8°39	5° 9	6°20	7°15	13°40	20°30	F 11
S 12	17 22 2	21° 5'22	12♊31	20°12	1♊ 9	17°31	15°36	26°56	19° 4	8°41	5° 9	6°16	7°12	13°47	20°33	S 12
S 13	17 25 59	22° 2'39	26°10	22°24	2°22	17°59	15°50	26°56	19° 2	8°43	5° 9	6°14	7° 9	13°53	20°35	S 13
M14	17 29 55	22°59'55	9♊58	24°35	3°35	18°27	16° 4	26°55	19° 1	8°45	5° 9	6°D14	7° 6	14° 0	20°37	M14
T 15	17 33 52	23°57'11	23°57	26°46	4°48	18°56	16°17	26°54	18°59	8°47	5°D 9	6°R14	7° 3	14° 7	20°39	T 15
W16	17 37 49	24°54'25	8♊ 6	28°57	6° 1	19°25	16°31	26°54	18°57	8°50	5° 9	6°13	6°59	14°13	20°41	W16
T 17	17 41 45	25°51'39	22°24	1♈ 6	7°14	19°54	16°45	26°53	18°55	8°52	5° 9	6°11	6°56	14°20	20°43	T 17
F 18	17 45 42	26°48'53	6♊49	3°15	8°27	20°23	16°59	26°52	18°53	8°54	5° 9	6° 6	6°53	14°27	20°45	F 18
S 19	17 49 38	27°46'05	21°16	5°21	9°40	20°52	17°13	26°50	18°51	8°56	5° 9	5°59	6°50	14°33	20°47	S 19
S 20	17 53 35	28°43'17	5♊40	7°27	10°53	21°22	17°26	26°49	18°50	8°58	5°10	5°50	6°47	14°40	20°49	S 20
M21	17 57 31	29°40'29	19°55	9°31	12° 6	21°52	17°40	26°48	18°48	9° 0	5°10	5°40	6°43	14°47	20°51	M21
T 22	18 1 28	0♈37'41	3♈56	11°33	13°19	22°22	17°54	26°46	18°46	9° 2	5°10	5°30	6°40	14°53	20°52	T 22
W23	18 5 24	1°34'52	17°38	13°33	14°32	22°52	18° 7	26°45	18°45	9° 5	5°10	5°21	6°37	15° 0	20°54	W23
T 24	18 9 21	2°32'03	0♈58	15°31	15°45	23°22	18°21	26°43	18°43	9° 7	5°10	5°14	6°34	15° 7	20°56	T 24
F 25	18 13 18	3°29'14	13°56	17°27	16°58	23°53	18°35	26°42	18°41	9° 9	5°11	5°10	6°31	15°13	20°57	F 25
S 26	18 17 14	4°26'25	26°32	19°21	18°11	24°24	18°48	26°40	18°40	9°11	5°11	5° 8	6°28	15°20	20°59	S 26
S 27	18 21 11	5°23'36	8♈50	21°13	19°25	24°55	19° 2	26°38	18°38	9°13	5°12	5°D 8	6°24	15°27	21° 1	S 27
M28	18 25 7	6°20'47	20°53	23° 4	20°38	25°26	19°15	26°36	18°37	9°15	5°12	5° 8	6°21	15°33	21° 2	M28
T 29	18 29 4	7°17'58	2♊48	24°52	21°51	25°57	19°29	26°34	18°36	9°17	5°12	5°R 9	6°18	15°40	21° 3	T 29
W30	18 33 0	8°15'09	14♊38	26♈38	23♊ 4	26♊29	19♊42	26°32	18♊34	9♊19	5♊13	5♈ 9	6♈15	15°Y47	21°Y 5	W30

Delta T = 10.98 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1728

geocentric

JULY 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 57	9 ⁵⁵ 12'21	26 ⁴⁷ 30	28 ⁵² 21	24 ¹¹ 17	27 ¹⁰ 0	19 ¹⁵ 56	26 ⁰ R29	18 ⁰ R33	9 ¹¹ 21	5 ⁵ 13	5 ⁰ R 7	6 ¹ 12	15 ¹ Y53	21 ¹ Y 6	T 1
F 2	18 40 53	10 ⁰ 9'33	8 ⁵ 27	0 ⁰ 3	25 ⁰ 31	27 ⁰ 32	20 ⁰ 9	26 ⁰ 27	18 ⁰ M32	9 ⁰ 23	5 ⁰ 14	5 ⁰ 4	6 ⁰ 9	16 ⁰ 0	21 ⁰ 7	F 2
S 3	18 44 50	11 ⁰ 6'45	20 ⁰ 35	1 ⁰ 43	26 ⁰ 44	28 ⁰ 4	20 ⁰ 23	26 ⁰ 25	18 ⁰ 31	9 ⁰ 25	5 ⁰ 15	4 ⁰ 58	6 ⁰ 5	16 ⁰ 7	21 ⁰ 9	S 3
S 4	18 48 47	12 ⁰ 3'58	2 ¹¹ 56	3 ⁰ 20	27 ⁰ 57	28 ⁰ 37	20 ⁰ 36	26 ⁰ 22	18 ⁰ 29	9 ⁰ 27	5 ⁰ 15	4 ⁰ 50	6 ⁰ 2	16 ⁰ 14	21 ⁰ 10	S 4
M 5	18 52 43	13 ⁰ 1'11	15 ⁰ 34	4 ⁰ 56	29 ⁰ 11	29 ⁰ 9	20 ⁰ 49	26 ⁰ 20	18 ⁰ 28	9 ⁰ 29	5 ⁰ 16	4 ⁰ 42	5 ⁰ 59	16 ⁰ 20	21 ⁰ 11	M 5
T 6	18 56 40	13 ⁰ 58'25	28 ⁰ 29	6 ⁰ 29	0 ⁰ 24	29 ⁰ 42	21 ⁰ 3	26 ⁰ 17	18 ⁰ 27	9 ⁰ 31	5 ⁰ 16	4 ⁰ 33	5 ⁰ 56	16 ⁰ 27	21 ⁰ 12	T 6
W 7	19 0 36	14 ⁰ 55'38	11 ⁰ 41	8 ⁰ 1	1 ⁰ 37	0 ⁰ 14	21 ⁰ 16	26 ⁰ 14	18 ⁰ 26	9 ⁰ 33	5 ⁰ 17	4 ⁰ 24	5 ⁰ 53	16 ⁰ 34	21 ⁰ 13	W 7
T 8	19 4 33	15 ⁰ 52'52	25 ⁰ 9	9 ⁰ 30	2 ⁰ 51	0 ⁰ 47	21 ⁰ 29	26 ⁰ 11	18 ⁰ 25	9 ⁰ 35	5 ⁰ 18	4 ⁰ 18	5 ⁰ 49	16 ⁰ 40	21 ⁰ 14	T 8
F 9	19 8 29	16 ⁰ 50'06	8 ⁰ 50	10 ⁰ 57	4 ⁰ 4	1 ⁰ 20	21 ⁰ 42	26 ⁰ 8	18 ⁰ 24	9 ⁰ 37	5 ⁰ 19	4 ⁰ 13	5 ⁰ 46	16 ⁰ 47	21 ⁰ 15	F 9
S 10	19 12 26	17 ⁰ 47'20	22 ⁰ 42	12 ⁰ 22	5 ⁰ 18	1 ⁰ 53	21 ⁰ 55	26 ⁰ 5	18 ⁰ 23	9 ⁰ 38	5 ⁰ 20	4 ⁰ 11	5 ⁰ 43	16 ⁰ 54	21 ⁰ 16	S 10
S 11	19 16 23	18 ⁰ 44'34	6 ¹⁰ 42	13 ⁰ 44	6 ⁰ 31	2 ⁰ 27	22 ⁰ 9	26 ⁰ 2	18 ⁰ 23	9 ⁰ 40	5 ⁰ 20	4 ⁰ D10	5 ⁰ 40	17 ⁰ 0	21 ⁰ 17	S 11
M 12	19 20 19	19 ⁰ 41'49	20 ⁰ 47	15 ⁰ 5	7 ⁰ 45	3 ⁰ 0	22 ⁰ 22	25 ⁰ 59	18 ⁰ 22	9 ⁰ 42	5 ⁰ 21	4 ⁰ 11	5 ⁰ 37	17 ⁰ 7	21 ⁰ 17	M 12
T 13	19 24 16	20 ⁰ 39'03	4 ¹¹ 56	16 ⁰ 23	8 ⁰ 58	3 ⁰ 34	22 ⁰ 35	25 ⁰ 56	18 ⁰ 21	9 ⁰ 44	5 ⁰ 22	4 ⁰ 12	5 ⁰ 34	17 ⁰ 14	21 ⁰ 18	T 13
W 14	19 28 12	21 ⁰ 36'18	19 ⁰ 7	17 ⁰ 39	10 ⁰ 12	4 ⁰ 8	22 ⁰ 48	25 ⁰ 53	18 ⁰ 20	9 ⁰ 46	5 ⁰ 23	4 ⁰ R13	5 ⁰ 30	17 ⁰ 20	21 ⁰ 19	W 14
T 15	19 32 9	22 ⁰ 33'32	3 ¹¹ 18	18 ⁰ 52	11 ⁰ 25	4 ⁰ 42	23 ⁰ 0	25 ⁰ 50	18 ⁰ 20	9 ⁰ 47	5 ⁰ 24	4 ⁰ 12	5 ⁰ 27	17 ⁰ 27	21 ⁰ 19	T 15
F 16	19 36 5	23 ⁰ 30'47	17 ⁰ 27	20 ⁰ 3	12 ⁰ 39	5 ⁰ 16	23 ⁰ 13	25 ⁰ 46	18 ⁰ 19	9 ⁰ 49	5 ⁰ 25	4 ⁰ 10	5 ⁰ 24	17 ⁰ 34	21 ⁰ 20	F 16
S 17	19 40 2	24 ⁰ 28'02	1 ¹¹ 32	21 ⁰ 12	13 ⁰ 52	5 ⁰ 50	23 ⁰ 26	25 ⁰ 43	18 ⁰ 18	9 ⁰ 51	5 ⁰ 26	4 ⁰ 6	5 ⁰ 21	17 ⁰ 40	21 ⁰ 20	S 17
S 18	19 43 58	25 ⁰ 25'18	15 ⁰ 30	22 ⁰ 17	15 ⁰ 6	6 ⁰ 24	23 ⁰ 39	25 ⁰ 39	18 ⁰ 18	9 ⁰ 53	5 ⁰ 27	4 ⁰ 1	5 ⁰ 18	17 ⁰ 47	21 ⁰ 21	S 18
M 19	19 47 55	26 ⁰ 22'34	29 ⁰ 19	23 ⁰ 20	16 ⁰ 20	6 ⁰ 59	23 ⁰ 51	25 ⁰ 36	18 ⁰ 18	9 ⁰ 54	5 ⁰ 28	3 ⁰ 55	5 ⁰ 15	17 ⁰ 54	21 ⁰ 21	M 19
T 20	19 51 52	27 ⁰ 19'50	12 ⁰ 34	24 ⁰ 21	17 ⁰ 33	7 ⁰ 33	24 ⁰ 4	25 ⁰ 32	18 ⁰ 17	9 ⁰ 56	5 ⁰ 29	3 ⁰ 50	5 ⁰ 11	18 ⁰ 0	21 ⁰ 21	T 20
W 21	19 55 48	28 ⁰ 17'07	26 ⁰ 14	25 ⁰ 18	18 ⁰ 47	8 ⁰ 8	24 ⁰ 17	25 ⁰ 28	18 ⁰ 17	9 ⁰ 58	5 ⁰ 30	3 ⁰ 45	5 ⁰ 8	18 ⁰ 7	21 ⁰ 22	W 21
T 22	19 59 45	29 ⁰ 14'25	9 ¹¹ 17	26 ⁰ 12	20 ⁰ 1	8 ⁰ 43	24 ⁰ 29	25 ⁰ 24	18 ⁰ 17	9 ⁰ 59	5 ⁰ 32	3 ⁰ 41	5 ⁰ 5	18 ⁰ 14	21 ⁰ 22	T 22
F 23	20 3 41	0 ⁰ 11'43	22 ⁰ 3	27 ⁰ 4	21 ⁰ 14	9 ⁰ 18	24 ⁰ 42	25 ⁰ 21	18 ⁰ 16	10 ⁰ 1	5 ⁰ 33	3 ⁰ 39	5 ⁰ 2	18 ⁰ 20	21 ⁰ 22	F 23
S 24	20 7 38	1 ⁰ 9'02	4 ¹¹ 32	27 ⁰ 52	22 ⁰ 28	9 ⁰ 53	24 ⁰ 54	25 ⁰ 17	18 ⁰ 16	10 ⁰ 2	5 ⁰ 34	3 ⁰ D38	4 ⁰ 59	18 ⁰ 27	21 ⁰ 22	S 24
S 25	20 11 34	2 ⁰ 6'22	16 ⁰ 46	28 ⁰ 36	23 ⁰ 42	10 ⁰ 29	25 ⁰ 6	25 ⁰ 13	18 ⁰ 16	10 ⁰ 4	5 ⁰ 35	3 ⁰ 39	4 ⁰ 55	18 ⁰ 34	21 ⁰ 22	S 25
M 26	20 15 31	3 ⁰ 3'43	28 ⁰ 48	29 ⁰ 17	24 ⁰ 56	11 ⁰ 4	25 ⁰ 19	25 ⁰ 9	18 ⁰ 16	10 ⁰ 5	5 ⁰ 37	3 ⁰ 40	4 ⁰ 52	18 ⁰ 40	21 ⁰ 22	M 26
T 27	20 19 27	4 ⁰ 1'05	10 ¹ Y42	29 ⁰ 54	26 ⁰ 9	11 ⁰ 40	25 ⁰ 31	25 ⁰ 5	18 ⁰ D16	10 ⁰ 7	5 ⁰ 38	3 ⁰ 42	4 ⁰ 49	18 ⁰ 47	21 ⁰ 22	T 27
W 28	20 23 24	4 ⁰ 58'28	22 ⁰ 33	0 ¹¹ 27	27 ⁰ 23	12 ⁰ 15	25 ⁰ 43	25 ⁰ 1	18 ⁰ 16	10 ⁰ 8	5 ⁰ 39	3 ⁰ 44	4 ⁰ 46	18 ⁰ 54	21 ⁰ 22	W 28
T 29	20 27 21	5 ⁰ 55'52	4 ⁰ 25	0 ⁰ 56	28 ⁰ 37	12 ⁰ 51	25 ⁰ 55	24 ⁰ 57	18 ⁰ 16	10 ⁰ 10	5 ⁰ 41	3 ⁰ R44	4 ⁰ 43	19 ⁰ 1	21 ⁰ 22	T 29
F 30	20 31 17	6 ⁰ 53'17	16 ⁰ 24	1 ⁰ 21	29 ⁰ 51	13 ⁰ 27	26 ⁰ 7	24 ⁰ 52	18 ⁰ 16	10 ⁰ 11	5 ⁰ 42	3 ⁰ 44	4 ⁰ 40	19 ⁰ 7	21 ⁰ 21	F 30
S 31	20 35 14	7 ⁰ 50'44	28 ⁰ 33	1 ¹¹ 41	1 ⁰ 5	14 ⁰ 3	26 ⁰ 11	24 ⁰ 48	18 ⁰ M16	10 ⁰ 13	5 ⁰ 44	3 ⁰ 42	4 ⁰ 36	19 ⁰ Y14	21 ⁰ Y21	S 31

Delta T = 11.00 sec

Greg. Calendar

AUGUST 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 39 10	8♂48'12	10♂♂57	1♂♂56	2♂♂19	14♂40	26♂♂31	24♂R44	18♂♂16	10♂♂14	5♂45	3♂R40	4♂33	19♂Y21	21♂R21	S 1
M 2	20 43 7	9♂45'41	23♂40	2♂ 7	3♂33	15♂16	26♂43	24♂40	18♂17	10♂15	5♂46	3♂36	4♂30	19♂27	21♂Y20	M 2
T 3	20 47 3	10♂43'11	6♂243	2♂13	4♂47	15♂52	26♂55	24♂36	18♂17	10♂17	5♂48	3♂33	4♂27	19♂34	21♂20	T 3
W 4	20 51 0	11♂40'43	20♂ 8	2♂R13	6♂ 1	16♂29	27♂ 6	24♂31	18♂17	10♂18	5♂50	3♂30	4♂24	19♂41	21♂19	W 4
T 5	20 54 56	12♂38'16	3♂53	2♂ 8	7♂15	17♂ 6	27♂18	24♂27	18♂18	10♂19	5♂51	3♂27	4♂21	19♂47	21♂19	T 5
F 6	20 58 53	13♂35'49	17♂56	1♂58	8♂29	17♂42	27♂29	24♂22	18♂18	10♂20	5♂53	3♂26	4♂17	19♂54	21♂18	F 6
S 7	21 2 50	14♂33'24	2♂♂14	1♂42	9♂43	18♂19	27♂41	24♂18	18♂19	10♂22	5♂54	3♂D25	4♂14	20♂ 1	21♂18	S 7
S 8	21 6 46	15♂31'00	16♂40	1♂21	10♂57	18♂56	27♂52	24♂14	18♂19	10♂23	5♂56	3♂25	4♂11	20♂ 7	21♂17	S 8
M 9	21 10 43	16♂28'37	1♂10	0♂54	12♂11	19♂34	28♂ 3	24♂ 9	18♂20	10♂24	5♂58	3♂26	4♂ 8	20♂14	21♂16	M 9
T 10	21 14 39	17♂26'15	15♂38	0♂23	13♂25	20♂11	28♂15	24♂ 5	18♂21	10♂25	5♂59	3♂27	4♂ 5	20♂21	21♂15	T 10
W 11	21 18 36	18♂23'54	0♂♂ 2	29♂46	14♂39	20♂48	28♂26	24♂ 0	18♂22	10♂26	6♂ 1	3♂28	4♂ 1	20♂27	21♂14	W 11
T 12	21 22 32	19♂21'34	14♂17	29♂ 6	15♂53	21♂26	28♂37	23♂56	18♂22	10♂27	6♂ 3	3♂R29	3♂58	20♂34	21♂13	T 12
F 13	21 26 29	20♂19'15	28♂21	28♂21	17♂ 8	22♂ 4	28♂48	23♂51	18♂23	10♂28	6♂ 4	3♂29	3♂55	20♂41	21♂12	F 13
S 14	21 30 25	21♂16'57	12♂12	27♂33	18♂22	22♂41	28♂58	23♂47	18♂24	10♂29	6♂ 6	3♂28	3♂52	20♂48	21♂11	S 14
S 15	21 34 22	22♂14'40	25♂50	26♂43	19♂36	23♂19	29♂ 9	23♂42	18♂25	10♂30	6♂ 8	3♂27	3♂49	20♂54	21♂10	S 15
M 16	21 38 19	23♂12'24	9♂515	25♂51	20♂50	23♂57	29♂20	23♂38	18♂26	10♂31	6♂10	3♂26	3♂46	21♂ 1	21♂ 9	M 16
T 17	21 42 15	24♂10'10	22♂25	24♂58	22♂ 4	24♂35	29♂30	23♂33	18♂27	10♂32	6♂12	3♂25	3♂42	21♂ 8	21♂ 8	T 17
W 18	21 46 12	25♂ 7'56	5♂21	24♂ 6	23♂19	25♂13	29♂41	23♂29	18♂28	10♂33	6♂14	3♂24	3♂39	21♂14	21♂ 7	W 18
T 19	21 50 8	26♂ 5'44	0♂ 4	23♂15	24♂33	25♂52	29♂51	23♂24	18♂29	10♂34	6♂15	3♂23	3♂36	21♂21	21♂ 5	T 19
F 20	21 54 5	27♂ 3'34	18♂33	22♂27	25♂47	26♂30	0♂ 1	23♂20	18♂31	10♂35	6♂17	3♂D23	3♂33	21♂28	21♂ 4	F 20
S 21	21 58 1	28♂ 1'24	12♂50	21♂43	27♂ 2	27♂ 8	0♂12	23♂15	18♂32	10♂35	6♂19	3♂23	3♂30	21♂34	21♂ 3	S 21
S 22	22 1 58	28♂59'17	24♂57	21♂ 3	28♂16	27♂47	0♂22	23♂11	18♂33	10♂36	6♂21	3♂23	3♂27	21♂41	21♂ 1	S 22
M 23	22 5 54	29♂57'11	6♂Y56	20♂28	29♂30	28♂26	0♂32	23♂ 6	18♂34	10♂37	6♂23	3♂23	3♂23	21♂48	21♂ 0	M 23
T 24	22 9 51	0♂♂55'07	18♂48	20♂ 0	0♂♂45	29♂ 5	0♂41	23♂ 2	18♂36	10♂38	6♂25	3♂24	3♂20	21♂54	20♂58	T 24
W 25	22 13 48	1♂53'04	0♂39	19♂39	1♂59	29♂43	0♂51	22♂57	18♂37	10♂38	6♂27	3♂24	3♂17	22♂ 1	20♂57	W 25
T 26	22 17 44	2♂51'03	12♂30	19♂26	3♂13	0♂♂22	1♂ 1	22♂53	18♂39	10♂39	6♂29	3♂24	3♂14	22♂ 8	20♂55	T 26
F 27	22 21 41	3♂49'05	24♂28	19♂D20	4♂28	1♂ 1	1♂10	22♂48	18♂40	10♂39	6♂31	3♂R24	3♂11	22♂14	20♂53	F 27
S 28	22 25 37	4♂47'08	6♂♂35	19♂23	5♂42	1♂41	1♂20	22♂44	18♂42	10♂40	6♂33	3♂D24	3♂ 7	22♂21	20♂51	S 28
S 29	22 29 34	5♂45'13	18♂58	19♂34	6♂57	2♂20	1♂29	22♂40	18♂44	10♂41	6♂35	3♂24	3♂ 4	22♂28	20♂50	S 29
M 30	22 33 30	6♂43'20	1♂39	19♂54	8♂11	2♂59	1♂38	22♂35	18♂45	10♂41	6♂37	3♂24	3♂ 1	22♂35	20♂48	M 30
T 31	22 37 27	7♂41'30	14♂42	20♂22	9♂26	3♂♂39	1♂47	22♂31	18♂47	10♂41	6♂39	3♂25	2♂58	22♂Y41	20♂Y46	T 31

ASTRODIENST EPHEMERIS for the year 1728

geocentric

SEPTEMBER 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	22 41 23	8 ^h 39'41"	28 ^h 10'	20 ^h 59'	10 ^h 40'	4 ^h 19'	1 ^h 56'	22 ^h 27'	18 ^h 49'	10 ^h 42'	6 ^h 42'	3 ^h 25'	2 ^h 55'	22 ^h 48'	20 ^h 44'	W 1
T 2	22 45 20	9 ^h 37'54"	12 ^h 03'	21 ^h 44'	11 ^h 55'	4 ^h 58'	2 ^h 05'	22 ^h 23'	18 ^h 51'	10 ^h 42'	6 ^h 44'	3 ^h 26'	2 ^h 52'	22 ^h 55'	20 ^h 42'	T 2
F 3	22 49 17	10 ^h 36'08"	26 ^h 20'	22 ^h 36'	13 ^h 09'	5 ^h 38'	2 ^h 14'	22 ^h 18'	18 ^h 52'	10 ^h 43'	6 ^h 46'	3 ^h 26'	2 ^h 48'	23 ^h 01'	20 ^h 40'	F 3
S 4	22 53 13	11 ^h 34'25"	10 ^h 56'	23 ^h 36'	14 ^h 24'	6 ^h 18'	2 ^h 22'	22 ^h 14'	18 ^h 54'	10 ^h 43'	6 ^h 48'	3 ^h 26'	2 ^h 45'	23 ^h 08'	20 ^h 38'	S 4
S 5	22 57 10	12 ^h 32'43"	25 ^h 46'	24 ^h 43'	15 ^h 38'	6 ^h 58'	2 ^h 31'	22 ^h 10'	18 ^h 56'	10 ^h 43'	6 ^h 50'	3 ^h 26'	2 ^h 42'	23 ^h 15'	20 ^h 36'	S 5
M 6	23 01 06	13 ^h 31'04"	10 ^h 41'	25 ^h 56'	16 ^h 53'	7 ^h 38'	2 ^h 39'	22 ^h 06'	18 ^h 58'	10 ^h 44'	6 ^h 52'	3 ^h 25'	2 ^h 39'	23 ^h 21'	20 ^h 34'	M 6
T 7	23 05 03	14 ^h 29'25"	25 ^h 35'	27 ^h 16'	18 ^h 08'	8 ^h 18'	2 ^h 47'	22 ^h 02'	19 ^h 00'	10 ^h 44'	6 ^h 55'	3 ^h 23'	2 ^h 36'	23 ^h 28'	20 ^h 32'	T 7
W 8	23 08 59	15 ^h 27'49"	10 ^h 19'	28 ^h 40'	19 ^h 22'	8 ^h 59'	2 ^h 55'	21 ^h 58'	19 ^h 02'	10 ^h 44'	6 ^h 57'	3 ^h 22'	2 ^h 33'	23 ^h 35'	20 ^h 30'	W 8
T 9	23 12 56	16 ^h 26'14"	24 ^h 47'	0 ^h 10'	20 ^h 37'	9 ^h 39'	3 ^h 03'	21 ^h 54'	19 ^h 05'	10 ^h 44'	6 ^h 59'	3 ^h 21'	2 ^h 29'	23 ^h 41'	20 ^h 27'	T 9
F 10	23 16 52	17 ^h 24'41"	8 ^h 56'	1 ^h 44'	21 ^h 51'	10 ^h 19'	3 ^h 11'	21 ^h 50'	19 ^h 07'	10 ^h 44'	7 ^h 01'	3 ^h 20'	2 ^h 26'	23 ^h 48'	20 ^h 25'	F 10
S 11	23 20 49	18 ^h 23'09"	22 ^h 45'	3 ^h 22'	23 ^h 06'	11 ^h 00'	3 ^h 18'	21 ^h 46'	19 ^h 09'	10 ^h 44'	7 ^h 03'	3 ^h 20'	2 ^h 23'	23 ^h 55'	20 ^h 23'	S 11
S 12	23 24 46	19 ^h 21'39"	6 ^h 13'	5 ^h 02'	24 ^h 21'	11 ^h 41'	3 ^h 26'	21 ^h 43'	19 ^h 11'	10 ^h 44'	7 ^h 06'	3 ^h 21'	2 ^h 20'	24 ^h 02'	20 ^h 21'	S 12
M 13	23 28 42	20 ^h 20'11"	19 ^h 21'	6 ^h 46'	25 ^h 35'	12 ^h 21'	3 ^h 33'	21 ^h 39'	19 ^h 14'	10 ^h 44'	7 ^h 08'	3 ^h 22'	2 ^h 17'	24 ^h 08'	20 ^h 18'	M 13
T 14	23 32 39	21 ^h 18'44"	2 ^h 33'	8 ^h 32'	26 ^h 50'	13 ^h 02'	3 ^h 40'	21 ^h 35'	19 ^h 16'	10 ^h 44'	7 ^h 10'	3 ^h 23'	2 ^h 13'	24 ^h 15'	20 ^h 16'	T 14
W 15	23 36 35	22 ^h 17'19"	14 ^h 49'	10 ^h 19'	28 ^h 05'	13 ^h 43'	3 ^h 47'	21 ^h 32'	19 ^h 18'	10 ^h 44'	7 ^h 12'	3 ^h 25'	2 ^h 10'	24 ^h 22'	20 ^h 13'	W 15
T 16	23 40 32	23 ^h 15'56"	27 ^h 13'	12 ^h 07'	29 ^h 19'	14 ^h 24'	3 ^h 54'	21 ^h 28'	19 ^h 21'	10 ^h 44'	7 ^h 15'	3 ^h 25'	2 ^h 07'	24 ^h 28'	20 ^h 11'	T 16
F 17	23 44 28	24 ^h 14'34"	9 ^h 27'	13 ^h 57'	0 ^h 34'	15 ^h 05'	4 ^h 01'	21 ^h 25'	19 ^h 23'	10 ^h 44'	7 ^h 17'	3 ^h 25'	2 ^h 04'	24 ^h 35'	20 ^h 08'	F 17
S 18	23 48 25	25 ^h 13'14"	21 ^h 32'	15 ^h 47'	1 ^h 49'	15 ^h 47'	4 ^h 08'	21 ^h 22'	19 ^h 26'	10 ^h 44'	7 ^h 19'	3 ^h 24'	2 ^h 01'	24 ^h 42'	20 ^h 06'	S 18
S 19	23 52 21	26 ^h 11'57"	3 ^h 31'	17 ^h 38'	3 ^h 03'	16 ^h 28'	4 ^h 14'	21 ^h 18'	19 ^h 28'	10 ^h 44'	7 ^h 22'	3 ^h 22'	1 ^h 58'	24 ^h 48'	20 ^h 03'	S 19
M 20	23 56 18	27 ^h 10'41"	15 ^h 25'	19 ^h 29'	4 ^h 18'	17 ^h 09'	4 ^h 20'	21 ^h 15'	19 ^h 31'	10 ^h 44'	7 ^h 24'	3 ^h 19'	1 ^h 54'	24 ^h 55'	20 ^h 01'	M 20
T 21	0 0 14	28 ^h 09'27"	27 ^h 16'	21 ^h 19'	5 ^h 33'	17 ^h 51'	4 ^h 26'	21 ^h 12'	19 ^h 33'	10 ^h 43'	7 ^h 26'	3 ^h 15'	1 ^h 51'	25 ^h 02'	19 ^h 58'	T 21
W 22	0 4 11	29 ^h 08'16"	9 ^h 06'	23 ^h 10'	6 ^h 47'	18 ^h 32'	4 ^h 32'	21 ^h 09'	19 ^h 36'	10 ^h 43'	7 ^h 29'	3 ^h 10'	1 ^h 48'	25 ^h 08'	19 ^h 56'	W 22
T 23	0 8 08	0 ^h 07'07"	20 ^h 59'	25 ^h 00'	8 ^h 02'	19 ^h 14'	4 ^h 38'	21 ^h 06'	19 ^h 39'	10 ^h 43'	7 ^h 31'	3 ^h 06'	1 ^h 45'	25 ^h 15'	19 ^h 53'	T 23
F 24	0 12 4	1 ^h 06'00"	2 ^h 56'	26 ^h 50'	9 ^h 17'	19 ^h 56'	4 ^h 44'	21 ^h 03'	19 ^h 42'	10 ^h 43'	7 ^h 33'	3 ^h 02'	1 ^h 42'	25 ^h 22'	19 ^h 50'	F 24
S 25	0 16 1	2 ^h 04'55"	15 ^h 03'	28 ^h 39'	10 ^h 32'	20 ^h 37'	4 ^h 49'	21 ^h 00'	19 ^h 44'	10 ^h 42'	7 ^h 36'	3 ^h 00'	1 ^h 38'	25 ^h 29'	19 ^h 48'	S 25
S 26	0 19 57	3 ^h 03'53"	27 ^h 22'	0 ^h 27'	11 ^h 46'	21 ^h 19'	4 ^h 55'	20 ^h 57'	19 ^h 47'	10 ^h 42'	7 ^h 38'	2 ^h 58'	1 ^h 35'	25 ^h 35'	19 ^h 45'	S 26
M 27	0 23 54	4 ^h 02'53"	9 ^h 58'	2 ^h 15'	13 ^h 01'	22 ^h 01'	5 ^h 00'	20 ^h 54'	19 ^h 50'	10 ^h 41'	7 ^h 40'	2 ^h 58'	1 ^h 32'	25 ^h 42'	19 ^h 42'	M 27
T 28	0 27 50	5 ^h 01'55"	22 ^h 55'	4 ^h 02'	14 ^h 16'	22 ^h 43'	5 ^h 05'	20 ^h 52'	19 ^h 53'	10 ^h 41'	7 ^h 43'	2 ^h 59'	1 ^h 29'	25 ^h 49'	19 ^h 39'	T 28
W 29	0 31 47	6 ^h 00'59"	6 ^h 17'	5 ^h 48'	15 ^h 31'	23 ^h 25'	5 ^h 10'	20 ^h 49'	19 ^h 56'	10 ^h 40'	7 ^h 45'	3 ^h 01'	1 ^h 26'	25 ^h 55'	19 ^h 37'	W 29
T 30	0 35 43	7 ^h 00'06"	20 ^h 06'	7 ^h 33'	16 ^h 45'	24 ^h 08'	5 ^h 14'	20 ^h 47'	19 ^h 59'	10 ^h 40'	7 ^h 47'	3 ^h 02'	1 ^h 23'	26 ^h 02'	19 ^h 34'	T 30

Delta T = 11.02 sec

Greg. Calendar

OCTOBER 1728

00:00 UT

Day	Sid.t	☉	☾	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	0 39 40	7♂59'15	4♂22	9♂18	18♂0	24♂50	5♂19	20♂45	20♂2	10♂39	7♂50	3♂R 3	1♂19	26♂9	19♂31	F 1
S 2	0 43 37	8°58'27	19° 4	11° 2	19°15	25°32	5°23	20°42	20° 5	10♂39	7°52	3♂ 2	1°16	26°15	19♂28	S 2
S 3	0 47 33	9°57'40	4♂ 5	12°45	20°30	26°15	5°27	20°40	20° 8	10°38	7°54	2°59	1°13	26°22	19°25	S 3
M 4	0 51 30	10°56'56	19°18	14°27	21°44	26°57	5°31	20°38	20°11	10°37	7°57	2°55	1°10	26°29	19°23	M 4
T 5	0 55 26	11°56'13	4♂32	16° 9	22°59	27°40	5°35	20°36	20°14	10°37	7°59	2°49	1° 7	26°36	19°20	T 5
W 6	0 59 23	12°55'33	19°36	17°50	24°14	28°23	5°39	20°34	20°17	10°36	8° 1	2°43	1° 4	26°42	19°17	W 6
T 7	1 3 19	13°54'54	4♂23	19°29	25°29	29° 6	5°42	20°32	20°20	10°35	8° 4	2°37	1° 0	26°49	19°14	T 7
F 8	1 7 16	14°54'18	18°45	21° 9	26°44	29°49	5°45	20°31	20°23	10°35	8° 6	2°33	0°57	26°56	19°11	F 8
S 9	1 11 12	15°53'43	2♂40	22°47	27°58	0♂32	5°48	20°29	20°27	10°34	8° 8	2°30	0°54	27° 2	19° 8	S 9
S 10	1 15 9	16°53'10	16° 8	24°25	29°13	1°15	5°51	20°28	20°30	10°33	8°11	2°D30	0°51	27° 9	19° 5	S 10
M11	1 19 6	17°52'38	29°11	26° 2	0♂28	1°58	5°54	20°26	20°33	10°32	8°13	2°30	0°48	27°16	19° 3	M11
T 12	1 23 2	18°52'09	11♂53	27°38	1°43	2°41	5°56	20°25	20°36	10°31	8°15	2°31	0°44	27°22	19° 0	T 12
W13	1 26 59	19°51'41	24°18	29°14	2°58	3°24	5°58	20°24	20°40	10°30	8°18	2°33	0°41	27°29	18°57	W13
T 14	1 30 55	20°51'14	6♂29	0♂49	4°12	4° 8	6° 0	20°22	20°43	10°29	8°20	2°R33	0°38	27°36	18°54	T 14
F 15	1 34 52	21°50'50	18°32	2°24	5°27	4°51	6° 2	20°21	20°46	10°28	8°22	2°31	0°35	27°43	18°51	F 15
S 16	1 38 48	22°50'28	0♂28	3°57	6°42	5°34	6° 4	20°20	20°50	10°27	8°25	2°28	0°32	27°49	18°48	S 16
S 17	1 42 45	23°50'07	12°21	5°31	7°57	6°18	6° 5	20°20	20°53	10°26	8°27	2°21	0°29	27°56	18°45	S 17
M18	1 46 41	24°49'48	24°12	7° 3	9°12	7° 2	6° 7	20°19	20°57	10°25	8°29	2°13	0°25	28° 3	18°43	M18
T 19	1 50 38	25°49'32	6♂ 3	8°35	10°26	7°45	6° 8	20°18	21° 0	10°24	8°31	2° 3	0°22	28° 9	18°40	T 19
W20	1 54 35	26°49'17	17°56	10° 7	11°41	8°29	6° 9	20°18	21° 3	10°23	8°34	1°52	0°19	28°16	18°37	W20
T 21	1 58 31	27°49'05	29°53	11°38	12°56	9°13	6° 9	20°17	21° 7	10°22	8°36	1°41	0°16	28°23	18°34	T 21
F 22	2 2 28	28°48'55	11♂54	13° 8	14°11	9°57	6°10	20°17	21°10	10°21	8°38	1°32	0°13	28°29	18°31	F 22
S 23	2 6 24	29°48'46	24° 3	14°38	15°26	10°41	6°10	20°17	21°14	10°19	8°40	1°24	0°10	28°36	18°28	S 23
S 24	2 10 21	0♂48'41	6♂23	16° 7	16°40	11°25	6°R10	20°17	21°17	10°18	8°43	1°18	0° 6	28°43	18°26	S 24
M25	2 14 17	1°48'37	18°57	17°36	17°55	12° 9	6°10	20°D17	21°21	10°17	8°45	1°15	0° 3	28°50	18°23	M25
T 26	2 18 14	2°48'35	1♂48	19° 4	19°10	12°53	6°10	20°17	21°25	10°16	8°47	1°D14	29♂59	28°56	18°20	T 26
W27	2 22 10	3°48'36	15° 1	20°32	20°25	13°38	6° 9	20°17	21°28	10°15	8°49	1°15	29°57	29° 3	18°17	W27
T 28	2 26 7	4°48'39	28°39	21°59	21°40	14°22	6° 9	20°17	21°32	10°13	8°51	1°R15	29°54	29°10	18°15	T 28
F 29	2 30 4	5°48'48	12♂44	23°25	22°54	15° 6	6° 8	20°18	21°35	10°12	8°53	1°15	29°50	29°16	18°12	F 29
S 30	2 34 0	6°48'51	27°16	24°51	24° 9	15°51	6° 7	20°18	21°39	10°11	8°56	1°12	29°47	29°23	18° 9	S 30
S 31	2 37 57	7♂49'00	12♂12	26♂16	25♂24	16♂35	6♂ 5	20♂19	21♂43	10♂ 9	8♂58	1♂ 7	29♂44	29♂30	18♂ 6	S 31

ASTRODIENST EPHEMERIS for the year 1728

geocentric

NOVEMBER 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	2 41 53	8♂49'11	27♂24	27♂40	26♂39	17♂20	6°R 4	20♂19	21♂46	10°R 8	9♂0	0°R59	29♂41	29♂36	18°R 4	M 1
T 2	2 45 50	9°49'24	12♂43	29° 4	27°54	18° 5	6♂2	20°20	21°50	10♂6	9° 2	0°♂50	29°38	29°43	18°♂1	T 2
W 3	2 49 46	10°49'39	27°58	0♂26	29° 8	18°50	6° 0	20°21	21°54	10° 5	9° 4	0°39	29°35	29°50	17°59	W 3
T 4	2 53 43	11°49'56	12♂57	1°48	0♂23	19°34	5°58	20°22	21°57	10° 4	9° 6	0°29	29°31	29°57	17°56	T 4
F 5	2 57 39	12°50'14	27°32	3° 9	1°38	20°19	5°56	20°23	22° 1	10° 2	9° 8	0°20	29°28	0♂3	17°53	F 5
S 6	3 1 36	13°50'34	11♂38	4°28	2°53	21° 4	5°53	20°25	22° 5	10° 1	9°10	0°14	29°25	0°10	17°51	S 6
S 7	3 5 33	14°50'55	25°13	5°47	4° 8	21°49	5°51	20°26	22° 8	9°59	9°12	0°10	29°22	0°17	17°48	S 7
M 8	3 9 29	15°51'17	8♂20	7° 4	5°22	22°34	5°48	20°27	22°12	9°58	9°14	0° 8	29°19	0°23	17°46	M 8
T 9	3 13 26	16°51'41	21° 2	8°19	6°37	23°19	5°45	20°29	22°16	9°56	9°16	0°D 8	29°16	0°30	17°44	T 9
W10	3 17 22	17°52'07	3♂24	9°33	7°52	24° 5	5°41	20°31	22°19	9°55	9°18	0°R 8	29°12	0°37	17°41	W10
T 11	3 21 19	18°52'33	15°31	10°45	9° 7	24°50	5°38	20°32	22°23	9°53	9°20	0° 8	29° 9	0°44	17°39	T 11
F 12	3 25 15	19°53'01	27°28	11°54	10°21	25°35	5°34	20°34	22°27	9°51	9°22	0° 5	29° 6	0°50	17°36	F 12
S 13	3 29 12	20°53'31	9°♂19	13° 1	11°36	26°21	5°31	20°36	22°31	9°50	9°24	29♂59	29° 3	0°57	17°34	S 13
S 14	3 33 8	21°54'01	21° 9	14° 6	12°51	27° 6	5°27	20°38	22°34	9°48	9°26	29°50	29° 0	1° 4	17°32	S 14
M15	3 37 5	22°54'34	3♂0	15° 7	14° 6	27°51	5°22	20°40	22°38	9°47	9°27	29°39	28°56	1°10	17°30	M15
T 16	3 41 2	23°55'07	14°54	16° 5	15°20	28°37	5°18	20°42	22°42	9°45	9°29	29°25	28°53	1°17	17°28	T 16
W17	3 44 58	24°55'42	26°53	16°58	16°35	29°23	5°13	20°45	22°45	9°43	9°31	29°10	28°50	1°24	17°25	W17
T 18	3 48 55	25°56'19	8♂57	17°47	17°50	0♂8	5° 9	20°47	22°49	9°42	9°33	28°56	28°47	1°30	17°23	T 18
F 19	3 52 51	26°56'57	21° 9	18°31	19° 4	0°54	5° 4	20°50	22°53	9°40	9°35	28°42	28°44	1°37	17°21	F 19
S 20	3 56 48	27°57'37	3♂28	19° 9	20°19	1°40	4°59	20°52	22°57	9°39	9°36	28°31	28°41	1°44	17°19	S 20
S 21	4 0 44	28°58'18	15°56	19°41	21°34	2°25	4°53	20°55	23° 0	9°37	9°38	28°23	28°37	1°51	17°17	S 21
M22	4 4 41	29°59'01	28°36	20° 5	22°48	3°11	4°48	20°58	23° 4	9°35	9°40	28°18	28°34	1°57	17°15	M22
T 23	4 8 37	0♂59'45	11♂30	20°21	24° 3	3°57	4°42	21° 1	23° 8	9°34	9°41	28°15	28°31	2° 4	17°13	T 23
W24	4 12 34	2° 0'31	24°40	20°R28	25°18	4°43	4°37	21° 4	23°11	9°32	9°43	28°15	28°28	2°11	17°12	W24
T 25	4 16 31	3° 1'19	8♂10	20°26	26°33	5°29	4°31	21° 7	23°15	9°30	9°45	28°15	28°25	2°17	17°10	T 25
F 26	4 20 27	4° 2'08	22° 2	20°13	27°47	6°15	4°25	21°10	23°19	9°28	9°46	28°14	28°22	2°24	17° 8	F 26
S 27	4 24 24	5° 2'58	6♂18	19°50	29° 2	7° 1	4°19	21°13	23°22	9°27	9°48	28°11	28°18	2°31	17° 6	S 27
S 28	4 28 20	6° 3'50	20°55	19°15	0♂16	7°47	4°12	21°17	23°26	9°25	9°49	28° 6	28°15	2°38	17° 5	S 28
M29	4 32 17	7° 4'43	5♂50	18°29	1°31	8°33	4° 6	21°20	23°30	9°23	9°51	27°57	28°12	2°44	17° 3	M29
T 30	4 36 13	8♂5'38	20♂55	17♂33	2♂46	9♂20	3♂59	21♂24	23♂33	9♂22	9♂52	27♂47	28♂9	2♂51	17♂1	T 30

Delta T = 11.04 sec

Greg. Calendar

DECEMBER 1728

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	4 40 10	9♂6'34	6♂0	16°R27	4♂0	10♂6	3°R53	21♂27	23♂37	9°R20	9♂54	27°R35	28♂6	2♂58	17°R 0	W 1
T 2	4 44 6	10° 7'31	20°56	15♂14	5°15	10°52	3♂46	21°31	23°41	9♂18	9°55	27♂24	28° 2	3° 4	16°♂58	T 2
F 3	4 48 3	11° 8'29	5♂33	13°54	6°30	11°39	3°39	21°35	23°44	9°17	9°57	27°14	27°59	3°11	16°57	F 3
S 4	4 52 0	12° 9'28	19°43	12°32	7°44	12°25	3°32	21°39	23°48	9°15	9°58	27° 6	27°56	3°18	16°56	S 4
S 5	4 55 56	13°10'28	3♂25	11° 9	8°59	13°12	3°25	21°43	23°51	9°13	9°59	27° 2	27°53	3°25	16°54	S 5
M 6	4 59 53	14°11'28	16°39	9°49	10°13	13°58	3°17	21°47	23°55	9°12	10° 0	26°59	27°50	3°31	16°53	M 6
T 7	5 3 49	15°12'29	29°26	8°33	11°28	14°45	3°10	21°51	23°59	9°10	10° 2	26°D59	27°47	3°38	16°52	T 7
W 8	5 7 46	16°13'30	11♂51	7°25	12°43	15°31	3° 2	21°55	24° 2	9° 8	10° 3	26°R59	27°43	3°45	16°51	W 8
T 9	5 11 42	17°14'32	24° 0	6°26	13°57	16°18	2°55	22° 0	24° 6	9° 6	10° 4	26°59	27°40	3°51	16°50	T 9
F 10	5 15 39	18°15'34	5°♂58	5°37	15°12	17° 4	2°47	22° 4	24° 9	9° 5	10° 5	26°57	27°37	3°58	16°49	F 10
S 11	5 19 36	19°16'37	17°49	5° 0	16°26	17°51	2°40	22° 9	24°13	9° 3	10° 6	26°53	27°34	4° 5	16°48	S 11
S 12	5 23 32	20°17'40	29°39	4°33	17°41	18°38	2°32	22°13	24°16	9° 1	10° 8	26°47	27°31	4°12	16°47	S 12
M13	5 27 29	21°18'44	11♂31	4°17	18°55	19°25	2°24	22°18	24°19	9° 0	10° 9	26°38	27°28	4°18	16°46	M13
T 14	5 31 25	22°19'49	23°29	4°D12	20° 9	20°11	2°16	22°22	24°23	8°58	10°10	26°26	27°24	4°25	16°45	T 14
W15	5 35 22	23°20'53	5♂35	4°17	21°24	20°58	2° 8	22°27	24°26	8°56	10°11	26°14	27°21	4°32	16°44	W15
T 16	5 39 18	24°21'59	17°50	4°31	22°38	21°45	2° 0	22°32	24°30	8°55	10°12	26° 2	27°18	4°38	16°44	T 16
F 17	5 43 15	25°23'05	0♂15	4°53	23°53	22°32	1°52	22°37	24°33	8°53	10°13	25°50	27°15	4°45	16°43	F 17
S 18	5 47 11	26°24'11	12°50	5°23	25° 7	23°19	1°44	22°42	24°36	8°52	10°14	25°41	27°12	4°52	16°42	S 18
S 19	5 51 8	27°25'18	25°36	5°59	26°21	24° 6	1°36	22°47	24°40	8°50	10°14	25°34	27° 8	4°59	16°42	S 19
M20	5 55 5	28°26'25	8♂32	6°42	27°36	24°53	1°28	22°52	24°43	8°48	10°15	25°30	27° 5	5° 5	16°41	M20
T 21	5 59 1	29°27'33	21°40	7°30	28°50	25°40	1°20	22°57	24°46	8°47	10°16	25°D29	27° 2	5°12	16°41	T 21
W22	6 2 58	0♂28'41	5♂0	8°23	0♂4	26°27	1°12	23° 3	24°49	8°45	10°17	25°29	26°59	5°19	16°41	W22
T 23	6 6 54	1°29'50	18°34	9°20	1°18	27°14	1° 3	23° 8	24°52	8°44	10°18	25°30	26°56	5°25	16°40	T 23
F 24	6 10 51	2°31'00	2♂22	10°20	2°33	28° 1	0°55	23°14	24°56	8°42	10°18	25°R31	26°53	5°32	16°40	F 24
S 25	6 14 47	3°32'10	16°26	11°24	3°47	28°48	0°47	23°19	24°59	8°41	10°19	25°30	26°49	5°39	16°40	S 25
S 26	6 18 44	4°33'20	0♂45	12°31	5° 1	29°35	0°39	23°25	25° 2	8°39	10°20	25°27	26°46	5°46	16°40	S 26
M27	6 22 40	5°34'31	15°16	13°41	6°15	0♂22	0°31	23°30	25° 5	8°38	10°20	25°22	26°43	5°52	16°D40	M27
T 28	6 26 37	6°35'43	29°55	14°52	7°29	1° 9	0°23	23°36	25° 8	8°36	10°21	25°15	26°40	5°59	16°40	T 28
W29	6 30 34	7°36'55	14♂35	16° 6	8°43	1°57	0°15	23°42	25°11	8°35	10°21	25° 7	26°37	6° 6	16°40	W29
T 30	6 34 30	8°38'07	29° 9	17°22	9°57	2°44	0° 7	23°47	25°14	8°33	10°22	24°59	26°34	6°12	16°40	T 30
F 31	6 38 27	9♂39'19	13♂30	18♂39	11♂11	3♂31	29♂59	23♂53	25♂17	8♂32	10♂22	24♂52	26♂30	6♂19	16°♂40	F 31

Delta T = 11.05 sec

Greg. Calendar