



Astrodienst Ephemeris Tables for the year 1683

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 1683

geocentric

JANUARY 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	6 42 55	10°35'35	15°42'	20°33'	20°29'	12°40'	21°R12	19°R34	24°R12	25°39'	16°R17	14°D36	16°8	24°45'	24°R39	F 1
S 2	6 46 52	11°51'46	27°30'	21°55'	20°57'	13° 7'	21°R 7'	19°R30	24°D12	25°41'	16°R16	14°R36	16° 5'	24°51'	24°Y39	S 2
S 3	6 50 49	12°52'56	9°16'	23°17'	21°23'	13°34'	21° 2'	19°27'	24°Y12	25°42'	16°15'	14°38'	16° 1'	24°58'	24°39'	S 3
M 4	6 54 45	13°54'06	21° 5'	24°40'	21°48'	14° 0'	20°57'	19°24'	24°12'	25°44'	16°13'	14°40'	15°58'	25° 5'	24°D39	M 4
T 5	6 58 42	14°55'16	3°Y 1	26° 5'	22°11'	14°27'	20°52'	19°20'	24°12'	25°46'	16°12'	14°42'	15°55'	25°11'	24°39'	T 5
W 6	7 2 38	15°56'25	15° 9'	27°30'	22°32'	14°53'	20°47'	19°17'	24°12'	25°48'	16°11'	14°R42	15°52'	25°18'	24°39'	W 6
T 7	7 6 35	16°57'34	27°34'	28°56'	22°51'	15°19'	20°41'	19°13'	24°13'	25°50'	16° 9'	14°42'	15°49'	25°25'	24°39'	T 7
F 8	7 10 31	17°58'42	10°R22	0°R22	23° 8'	15°45'	20°36'	19° 9'	24°13'	25°52'	16° 8'	14°40'	15°45'	25°31'	24°39'	F 8
S 9	7 14 28	18°59'49	23°34'	1°50'	23°23'	16°11'	20°30'	19° 5'	24°13'	25°53'	16° 7'	14°37'	15°42'	25°38'	24°40'	S 9
S 10	7 18 24	20° 0'56	7°II14	3°18'	23°35'	16°36'	20°24'	19° 1'	24°14'	25°55'	16° 6'	14°33'	15°39'	25°45'	24°40'	S 10
M 11	7 22 21	21° 2'02	21°21'	4°46'	23°46'	17° 1'	20°18'	18°57'	24°14'	25°57'	16° 4'	14°30'	15°36'	25°51'	24°40'	M 11
T 12	7 26 18	22° 3'07	5°R52	6°16'	23°54'	17°26'	20°12'	18°53'	24°15'	25°59'	16° 3'	14°26'	15°33'	25°58'	24°41'	T 12
W 13	7 30 14	23° 4'12	20°42'	7°45'	23°59'	17°51'	20° 6'	18°49'	24°15'	26° 1'	16° 2'	14°24'	15°30'	26° 5'	24°41'	W 13
T 14	7 34 11	24° 5'16	5°R42	9°16'	24° 3'	18°15'	19°59'	18°45'	24°16'	26° 3'	16° 0'	14°23'	15°26'	26°11'	24°42'	T 14
F 15	7 38 7	25° 6'20	20°44'	10°47'	24°R 4	18°39'	19°53'	18°41'	24°16'	26° 5'	15°59'	14°D23	15°23'	26°18'	24°43'	F 15
S 16	7 42 4	26° 7'23	5°R40	12°19'	24° 2'	19° 3'	19°46'	18°37'	24°17'	26° 7'	15°58'	14°24'	15°20'	26°24'	24°43'	S 16
S 17	7 46 0	27° 8'25	20°22'	13°51'	23°58'	19°26'	19°39'	18°32'	24°18'	26° 9'	15°57'	14°25'	15°17'	26°31'	24°44'	S 17
M 18	7 49 57	28° 9'27	4°R46	15°24'	23°51'	19°49'	19°32'	18°28'	24°19'	26°11'	15°55'	14°26'	15°14'	26°38'	24°45'	M 18
T 19	7 53 54	29°10'29	18°48'	16°57'	23°42'	20°12'	19°25'	18°24'	24°20'	26°13'	15°54'	14°27'	15°11'	26°44'	24°46'	T 19
W 20	7 57 50	0°11'30	2°R29	18°31'	23°31'	20°35'	19°18'	18°19'	24°20'	26°15'	15°53'	14°R27	15° 7'	26°51'	24°47'	W 20
T 21	8 1 47	1°12'31	15°49'	20° 6'	23°17'	20°57'	19°11'	18°15'	24°21'	26°18'	15°52'	14°27'	15° 4'	26°58'	24°48'	T 21
F 22	8 5 43	2°13'31	28°50'	21°41'	23° 0'	21°19'	19° 4'	18°10'	24°22'	26°20'	15°50'	14°26'	15° 1'	27° 4'	24°49'	F 22
S 23	8 9 40	3°14'30	11°R34	23°17'	22°41'	21°41'	18°56'	18° 5'	24°23'	26°22'	15°49'	14°24'	14°58'	27°11'	24°50'	S 23
S 24	8 13 36	4°15'29	24° 4'	24°53'	22°20'	22° 2'	18°49'	18° 1'	24°25'	26°24'	15°48'	14°23'	14°55'	27°18'	24°51'	S 24
M 25	8 17 33	5°16'27	6°R22	26°31'	21°56'	22°23'	18°41'	17°56'	24°26'	26°26'	15°47'	14°21'	14°51'	27°24'	24°52'	M 25
T 26	8 21 29	6°17'24	18°29'	28° 8'	21°31'	22°44'	18°34'	17°51'	24°27'	26°28'	15°46'	14°20'	14°48'	27°31'	24°53'	T 26
W 27	8 25 26	7°18'20	0°R29	29°47'	21° 3'	23° 4'	18°26'	17°47'	24°28'	26°30'	15°44'	14°19'	14°45'	27°38'	24°55'	W 27
T 28	8 29 23	8°19'15	12°22'	1°R26	20°33'	23°24'	18°18'	17°42'	24°30'	26°33'	15°43'	14°D19	14°42'	27°44'	24°56'	T 28
F 29	8 33 19	9°20'09	24°12'	3° 6'	20° 2'	23°43'	18°11'	17°37'	24°31'	26°35'	15°42'	14°19'	14°39'	27°51'	24°58'	F 29
S 30	8 37 16	10°21'01	5°R59	4°47'	19°29'	24° 3'	18° 3'	17°32'	24°32'	26°37'	15°41'	14°20'	14°36'	27°58'	24°59'	S 30
S 31	8 41 12	11°21'53	17°R47	6°R29	18°R55	24°R21	17°R55	17°R27	24°Y34	26°R39	15°R40	14°R20	14°R32	28°R 4	25°Y 1	S 31

Delta T = 21.99 sec

Greg. Calendar

FEBRUARY 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	8 45 9	12°22'42	29°R38	8°R11	18°R20	24°R40	17°R47	17°R23	24°Y35	26°R41	15°R39	14°R20	14°R29	28°R11	25°Y 2	M 1
T 2	8 49 5	13°23'31	11°Y35	9°54'	17°R44	24°58'	17°R39	17°R18	24°37'	26°44'	15°R37	14°21'	14°26'	28°17'	25° 4'	T 2
W 3	8 53 2	14°24'18	23°44'	11°38'	17° 7'	25°15'	17°31'	17°13'	24°38'	26°46'	15°36'	14°R21	14°23'	28°24'	25° 6'	W 3
T 4	8 56 58	15°25'04	6°R 7	13°22'	16°30'	25°32'	17°23'	17° 8'	24°40'	26°48'	15°35'	14°21'	14°20'	28°31'	25° 7'	T 4
F 5	9 0 55	16°25'47	18°49'	15° 8'	15°52'	25°49'	17°15'	17° 3'	24°42'	26°50'	15°34'	14°D21	14°17'	28°37'	25° 9'	F 5
S 6	9 4 51	17°26'30	1°R53	16°54'	15°15'	26° 5'	17° 7'	16°58'	24°43'	26°53'	15°33'	14°21'	14°13'	28°44'	25°11'	S 6
S 7	9 8 48	18°27'11	15°23'	18°41'	14°38'	26°21'	17° 0'	16°53'	24°45'	26°55'	15°32'	14°21'	14°10'	28°51'	25°13'	S 7
M 8	9 12 45	19°27'50	29°20'	20°28'	14° 2'	26°36'	16°52'	16°48'	24°47'	26°57'	15°31'	14°21'	14° 7'	28°57'	25°15'	M 8
T 9	9 16 41	20°28'27	13°R44	22°17'	13°27'	26°51'	16°44'	16°43'	24°49'	26°59'	15°30'	14°22'	14° 4'	29° 4'	25°17'	T 9
W 10	9 20 38	21°29'03	28°32'	24° 6'	12°52'	27° 5'	16°36'	16°39'	24°51'	27° 2'	15°29'	14°22'	14° 1'	29°11'	25°19'	W 10
T 11	9 24 34	22°29'37	13°R37	25°56'	12°19'	27°19'	16°28'	16°34'	24°53'	27° 4'	15°28'	14°R23	13°57'	29°17'	25°21'	T 11
F 12	9 28 31	23°30'10	28°51'	27°46'	11°48'	27°33'	16°20'	16°29'	24°55'	27° 6'	15°27'	14°22'	13°54'	29°24'	25°24'	F 12
S 13	9 32 27	24°30'40	14°R4	29°37'	11°18'	27°45'	16°12'	16°24'	24°57'	27° 9'	15°26'	14°22'	13°51'	29°31'	25°26'	S 13
S 14	9 36 24	25°31'10	29° 6'	1°R29	10°51'	27°58'	16° 4'	16°19'	24°59'	27°11'	15°25'	14°20'	13°48'	29°37'	25°28'	S 14
M 15	9 40 20	26°31'38	13°R50	3°21'	10°25'	28°10'	15°57'	16°15'	25° 1'	27°13'	15°24'	14°19'	13°45'	29°44'	25°30'	M 15
T 16	9 44 17	27°32'05	28° 9'	5°13'	10° 2'	28°21'	15°49'	16°10'	25° 3'	27°15'	15°23'	14°17'	13°42'	29°51'	25°33'	T 16
W 17	9 48 14	28°32'30	12°R 2	7° 5'	9°40'	28°32'	15°41'	16° 5'	25° 5'	27°18'	15°22'	14°16'	13°38'	29°57'	25°35'	W 17
T 18	9 52 10	29°32'54	25°27'	8°57'	9°21'	28°42'	15°34'	16° 0'	25° 8'	27°20'	15°21'	14°D16	13°35'	0°R 4	25°38'	T 18
F 19	9 56 7	0°R33'17	8°R27	10°49'	9° 5'	28°51'	15°26'	15°56'	25°10'	27°22'	15°21'	14°16'	13°32'	0°11'	25°40'	F 19
S 20	10 0 3	1°33'38	21° 6'	12°40'	8°51'	29° 0'	15°19'	15°51'	25°12'	27°24'	15°20'	14°17'	13°29'	0°17'	25°43'	S 20
S 21	10 4 0	2°33'58	3°R27	14°31'	8°39'	29° 9'	15°12'	15°47'	25°15'	27°27'	15°19'	14°18'	13°26'	0°24'	25°45'	S 21
M 22	10 7 56	3°34'17	15°34'	16°20'	8°30'	29°16'	15° 4'	15°42'	25°17'	27°29'	15°18'	14°20'	13°23'	0°30'	25°48'	M 22
T 23	10 11 53	4°34'33	27°31'	18° 7'	8°24'	29°23'	14°57'	15°38'	25°19'	27°31'	15°17'	14°21'	13°19'	0°37'	25°51'	T 23
W 24	10 15 49	5°34'49	9°R22	19°53'	8°20'	29°30'	14°50'	15°33'	25°22'	27°34'	15°17'	14°R22	13°16'	0°44'	25°53'	W 24
T 25	10 19 46	6°35'02	21°10'	21°36'	8°D18	29°36'	14°43'	15°29'	25°24'	27°36'	15°16'	14°22'	13°13'	0°50'	25°56'	T 25
F 26	10 23 43	7°35'14	2°R57	23°16'	8°19'	29°41'	14°36'	15°24'	25°27'	27°38'	15°15'	14°21'	13°10'	0°57'	25°59'	F 26
S 27	10 27 39	8°35'24	14°46'	24°53'	8°22'	29°45'	14°30'	15°20'	25°30'	27°40'	15°14'	14°18'	13° 7'	1° 4'	26° 2'	S 27
S 28	10 31 36	9°R35'32	26°R38	26°R25	8°R27	29°R49	14°R23	15°R16	25°Y32	27°R43	15°R14	14°R14	13°R 3	1°R10	26°Y 5	S 28

Delta T = 21.94 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1683

geocentric

MARCH 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	10 35 32	10°35'38	8°36'	27°53'	8°35'	29°52'	14°R17	15°R12	25°35'	27°45'	15°R13	14°R10	13°00'	1°17'	26°08'	M 1
T 2	10 39 29	11°35'42	20°41'	29°16'	8°45'	29°55'	14°01'	15°08'	25°37'	27°47'	15°012	14°05'	12°57'	1°24'	26°11'	T 2
W 3	10 43 25	12°35'44	2°56'	0°33'	8°57'	29°56'	14°04'	15°03'	25°40'	27°49'	15°12'	14°00'	12°54'	1°30'	26°14'	W 3
T 4	10 47 22	13°35'44	15°23'	1°43'	9°11'	29°57'	13°58'	14°05'	25°43'	27°51'	15°11'	13°56'	12°51'	1°37'	26°17'	T 4
F 5	10 51 18	14°35'41	28°05'	2°47'	9°27'	29°R58	13°52'	14°56'	25°46'	27°54'	15°11'	13°54'	12°48'	1°44'	26°20'	F 5
S 6	10 55 15	15°35'37	11°11'	3°44'	9°46'	29°57'	13°46'	14°52'	25°48'	27°56'	15°10'	13°D53	12°44'	1°50'	26°23'	S 6
S 7	10 59 12	16°35'30	24°26'	4°33'	10°06'	29°56'	13°40'	14°48'	25°51'	27°58'	15°10'	13°53'	12°41'	1°57'	26°26'	S 7
M 8	11 03 08	17°35'22	8°01'	5°14'	10°28'	29°54'	13°35'	14°44'	25°54'	28°00'	15°09'	13°54'	12°38'	2°04'	26°29'	M 8
T 9	11 07 05	18°35'11	22°19'	5°47'	10°51'	29°51'	13°29'	14°41'	25°57'	28°02'	15°09'	13°55'	12°35'	2°10'	26°32'	T 9
W10	11 11 01	19°34'57	6°01'	6°11'	11°17'	29°48'	13°24'	14°37'	26°00'	28°05'	15°08'	13°R56	12°32'	2°17'	26°36'	W10
T 11	11 14 58	20°34'42	21°43'	6°27'	11°44'	29°44'	13°19'	14°34'	26°03'	28°07'	15°08'	13°56'	12°28'	2°24'	26°39'	T 11
F 12	11 18 54	21°34'24	6°10'	6°R34	12°13'	29°39'	13°14'	14°30'	26°06'	28°09'	15°07'	13°55'	12°25'	2°30'	26°42'	F 12
S 13	11 22 51	22°34'04	22°02'	6°33'	12°43'	29°33'	13°09'	14°27'	26°09'	28°11'	15°07'	13°51'	12°22'	2°37'	26°46'	S 13
S 14	11 26 47	23°33'42	7°01'	6°24'	13°15'	29°27'	13°05'	14°24'	26°12'	28°13'	15°06'	13°46'	12°19'	2°44'	26°49'	S 14
M15	11 30 44	24°33'18	22°03'	6°07'	13°48'	29°19'	13°00'	14°20'	26°15'	28°15'	15°06'	13°40'	12°16'	2°50'	26°52'	M15
T 16	11 34 41	25°32'52	6°13'	5°42'	14°22'	29°11'	12°56'	14°17'	26°18'	28°17'	15°06'	13°33'	12°13'	2°57'	26°56'	T 16
W17	11 38 37	26°32'25	20°38'	5°11'	14°58'	29°02'	12°52'	14°14'	26°21'	28°19'	15°06'	13°28'	12°09'	3°03'	26°59'	W17
T 18	11 42 34	27°31'55	4°13'	4°34'	15°35'	28°53'	12°48'	14°12'	26°24'	28°21'	15°05'	13°23'	12°06'	3°10'	27°03'	T 18
F 19	11 46 30	28°31'24	17°20'	3°52'	16°14'	28°43'	12°44'	14°09'	26°27'	28°23'	15°05'	13°21'	12°03'	3°17'	27°06'	F 19
S 20	11 50 27	29°30'51	0°03'	3°06'	16°53'	28°31'	12°40'	14°06'	26°30'	28°25'	15°05'	13°D20	12°00'	3°23'	27°10'	S 20
S 21	11 54 23	0°30'17	12°21'	2°17'	17°34'	28°20'	12°37'	14°03'	26°34'	28°27'	15°05'	13°21'	11°57'	3°30'	27°13'	S 21
M22	11 58 20	1°29'41	24°25'	1°26'	18°16'	28°07'	12°34'	14°01'	26°37'	28°29'	15°04'	13°22'	11°54'	3°37'	27°17'	M22
T 23	12 02 16	2°29'02	6°01'	0°34'	18°59'	27°54'	12°31'	13°59'	26°40'	28°31'	15°04'	13°23'	11°50'	3°43'	27°20'	T 23
W24	12 06 13	3°28'22	18°07'	29°43'	19°42'	27°40'	12°28'	13°56'	26°43'	28°33'	15°04'	13°R23	11°47'	3°50'	27°24'	W24
T 25	12 10 09	4°27'40	29°53'	28°52'	20°27'	27°25'	12°25'	13°54'	26°46'	28°35'	15°04'	13°22'	11°44'	3°57'	27°28'	T 25
F 26	12 14 06	5°26'56	11°41'	28°04'	21°13'	27°09'	12°23'	13°52'	26°50'	28°37'	15°04'	13°18'	11°41'	4°03'	27°31'	F 26
S 27	12 18 03	6°26'11	23°33'	27°18'	21°59'	26°53'	12°20'	13°50'	26°53'	28°39'	15°04'	13°11'	11°38'	4°10'	27°35'	S 27
S 28	12 21 59	7°25'23	5°33'	26°36'	22°47'	26°36'	12°18'	13°48'	26°56'	28°41'	15°04'	13°03'	11°34'	4°17'	27°39'	S 28
M29	12 25 56	8°24'33	17°41'	25°59'	23°35'	26°19'	12°16'	13°46'	27°00'	28°43'	15°D 4	12°53'	11°31'	4°23'	27°42'	M29
T 30	12 29 52	9°23'41	29°59'	25°26'	24°24'	26°01'	12°14'	13°44'	27°03'	28°45'	15°04'	12°42'	11°28'	4°30'	27°46'	T 30
W31	12 33 49	10°22'47	12°28'	24°58'	25°13'	25°42'	12°013	13°043	27°06'	28°47'	15°04	12°032	11°025	4°37'	27°50'	W31

Delta T = 21.90 sec

Greg. Calendar

APRIL 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 45	11°21'50	25°07'	24°R36	26°04'	25°R23	12°R11	13°R41	27°10'	28°48'	15°04	12°R22	11°022	4°43'	27°54'	T 1
F 2	12 41 42	12°20'52	7°11'	24°19'	26°55'	25°03'	12°010	13°040	27°13'	28°50'	15°04	12°015	11°019	4°50'	27°57'	F 2
S 3	12 45 38	13°19'51	21°05'	24°07'	27°46'	24°43'	12°09'	13°38'	27°16'	28°52'	15°04	12°11'	11°015	4°57'	28°01'	S 3
S 4	12 49 35	14°18'48	4°06'	24°01'	28°39'	24°23'	12°08'	13°37'	27°20'	28°54'	15°04	12°08'	11°012	5°03'	28°05'	S 4
M 5	12 53 32	15°17'43	18°04'	24°D 0	29°32'	24°02'	12°08'	13°36'	27°23'	28°55'	15°05	12°D 8	11°009	5°10'	28°09'	M 5
T 6	12 57 28	16°16'35	2°00'	24°05'	0°425	23°41'	12°07'	13°35'	27°26'	28°57'	15°05	12°08'	11°006	5°17'	28°13'	T 6
W 7	13 01 25	17°15'25	16°15'	24°15'	1°19'	23°19'	12°07'	13°34'	27°30'	28°59'	15°05	12°R 9	11°003	5°23'	28°16'	W 7
T 8	13 05 21	18°14'13	0°10'	24°30'	2°14'	22°57'	12°D 7	13°34'	27°33'	29°00'	15°05	12°07'	10°59'	5°30'	28°20'	T 8
F 9	13 09 18	19°12'58	15°33'	24°49'	3°09'	22°35'	12°07'	13°33'	27°37'	29°02'	15°05	12°04'	10°56'	5°37'	28°24'	F 9
S 10	13 13 14	20°11'41	0°028	25°13'	4°05'	22°12'	12°07'	13°32'	27°40'	29°04'	15°06	11°58'	10°53'	5°43'	28°28'	S 10
S 11	13 17 11	21°10'22	15°22'	25°42'	5°01'	21°50'	12°08'	13°32'	27°44'	29°05'	15°06	11°49'	10°50'	5°50'	28°32'	S 11
M12	13 21 07	22°09'01	0°108	26°15'	5°58'	21°27'	12°09'	13°32'	27°47'	29°07'	15°06	11°39'	10°47'	5°57'	28°36'	M12
T 13	13 25 04	23°07'38	14°37'	26°52'	6°55'	21°05'	12°10'	13°31'	27°50'	29°08'	15°07	11°28'	10°44'	6°03'	28°39'	T 13
W14	13 29 01	24°06'14	28°42'	27°33'	7°52'	20°42'	12°11'	13°31'	27°54'	29°10'	15°07	11°18'	10°40'	6°10'	28°43'	W14
T 15	13 32 57	25°04'47	12°21'	28°17'	8°50'	20°19'	12°12'	13°D31	27°57'	29°11'	15°08	11°09'	10°37'	6°17'	28°47'	T 15
F 16	13 36 54	26°03'19	25°32'	29°05'	9°49'	19°56'	12°13'	13°31'	28°01'	29°13'	15°08	11°04'	10°34'	6°23'	28°51'	F 16
S 17	13 40 50	27°01'50	8°031	29°56'	10°48'	19°34'	12°15'	13°31'	28°04'	29°14'	15°08	11°00'	10°31'	6°30'	28°55'	S 17
S 18	13 44 47	28°00'18	20°40'	0°Y51	11°47'	19°11'	12°17'	13°32'	28°08'	29°16'	15°09	10°59'	10°28'	6°36'	28°59'	S 18
M19	13 48 43	28°58'45	2°046	1°49'	12°46'	18°49'	12°19'	13°32'	28°11'	29°17'	15°09	10°D59	10°25'	6°43'	29°03'	M19
T 20	13 52 40	29°57'11	14°41'	2°49'	13°46'	18°27'	12°21'	13°33'	28°15'	29°18'	15°10	10°R59	10°21'	6°50'	29°07'	T 20
W21	13 56 36	0°55'34	26°29'	3°52'	14°47'	18°05'	12°23'	13°33'	28°18'	29°20'	15°10	10°58'	10°18'	6°56'	29°11'	W21
T 22	14 00 33	1°53'57	8°16'	4°58'	15°47'	17°44'	12°26'	13°34'	28°21'	29°21'	15°11	10°55'	10°15'	7°03'	29°14'	T 22
F 23	14 04 30	2°52'17	20°07'	6°07'	16°48'	17°23'	12°28'	13°35'	28°25'	29°22'	15°12	10°50'	10°12'	7°10'	29°18'	F 23
S 24	14 08 26	3°50'36	2°Y 5	7°18'	17°49'	17°02'	12°31'	13°36'	28°28'	29°23'	15°12	10°42'	10°09'	7°16'	29°22'	S 24
S 25	14 12 23	4°48'53	14°14'	8°31'	18°51'	16°42'	12°34'	13°37'	28°32'	29°25'	15°13	10°31'	10°05'	7°23'	29°26'	S 25
M26	14 16 19	5°47'08	26°34'	9°47'	19°53'	16°22'	12°37'	13°38'	28°35'	29°26'	15°14	10°19'	10°02'	7°30'	29°30'	M26
T 27	14 20 16	6°45'22	9°08'	11°05'	20°55'	16°03'	12°41'	13°39'	28°39'	29°27'	15°14	10°05'	9°59'	7°36'	29°34'	T 27
W28	14 24 12	7°43'34	21°54'	12°26'	21°57'	15°44'	12°44'	13°41'	28°42'	29°28'	15°15	9°52'	9°56'	7°43'	29°38'	W28
T 29	14 28 09	8°41'44	4°11'	13°48'	23°00'	15°26'	12°48'	13°42'	28°45'	29°29'	15°16	9°40'	9°53'	7°50'	29°42'	T 29
F 30	14 32 05	9°39'53	18°11'	15°13'	24°03'	15°09'	12°052	13°044	28°49'	29°30'	15°016	9°031	9°050	7°56'	29°45'	F 30

Delta T = 21.85 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1683

geocentric

MAY 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 36 2	10♂38'00	1♂25	16♂39	25♂6	14°R52	12♂56	13♂45	28♂52	29♂31	15♂17	9°R25	9♂46	8♂3	29♂49	S 1
S 2	14 39 58	11°36'04	14°57	18° 8	26° 9	14♂36	13° 0	13°47	28°56	29°32	15°18	9♂21	9°43	8°10	29°53	S 2
M 3	14 43 55	12°34'07	28°40	19°39	27°13	14°20	13° 4	13°49	28°59	29°33	15°19	9°20	9°40	8°16	29°57	M 3
T 4	14 47 52	13°32'08	12♂234	21°12	28°16	14° 5	13° 9	13°51	29° 2	29°34	15°20	9°19	9°37	8°23	0♂1	T 4
W 5	14 51 48	14°30'07	26°39	22°47	29°20	13°51	13°14	13°53	29° 6	29°35	15°21	9°19	9°34	8°30	0° 5	W 5
T 6	14 55 45	15°28'04	10♂55	24°24	0♂24	13°38	13°19	13°55	29° 9	29°36	15°21	9°18	9°31	8°36	0° 8	T 6
F 7	14 59 41	16°25'59	25°20	26° 3	1°29	13°25	13°24	13°58	29°12	29°37	15°22	9°14	9°27	8°43	0°12	F 7
S 8	15 3 38	17°23'52	9♂51	27°44	2°33	13°14	13°29	14° 0	29°16	29°38	15°23	9° 7	9°24	8°50	0°16	S 8
S 9	15 7 34	18°21'44	24°21	29°27	3°38	13° 2	13°34	14° 3	29°19	29°38	15°24	8°58	9°21	8°56	0°20	S 9
M10	15 11 31	19°19'34	8♂45	1♂12	4°43	12°52	13°40	14° 5	29°22	29°39	15°25	8°47	9°18	9° 3	0°23	M10
T 11	15 15 27	20°17'22	22°56	2°59	5°48	12°43	13°45	14° 8	29°26	29°40	15°26	8°36	9°15	9°10	0°27	T 11
W12	15 19 24	21°15'09	6♂49	4°49	6°54	12°34	13°51	14°11	29°29	29°40	15°27	8°25	9°11	9°16	0°31	W12
T 13	15 23 21	22°12'55	20°20	6°40	7°59	12°26	13°57	14°14	29°32	29°41	15°28	8°16	9° 8	9°23	0°35	T 13
F 14	15 27 17	23°10'39	3♂28	8°33	9° 5	12°19	14° 3	14°17	29°35	29°42	15°29	8° 9	9° 5	9°30	0°38	F 14
S 15	15 31 14	24° 8'23	16°12	10°28	10°11	12°13	14° 9	14°20	29°39	29°42	15°30	8° 5	9° 2	9°36	0°42	S 15
S 16	15 35 10	25° 6'05	28°36	12°25	11°17	12° 7	14°15	14°23	29°42	29°43	15°31	8° 3	8°59	9°43	0°45	S 16
M17	15 39 7	26° 3'46	10♂44	14°24	12°23	12° 3	14°22	14°26	29°45	29°43	15°32	8°D 3	8°56	9°50	0°49	M17
T 18	15 43 3	27° 1'26	22°40	16°25	13°29	11°59	14°29	14°29	29°48	29°44	15°34	8°R 3	8°52	9°56	0°53	T 18
W19	15 47 0	27°59'04	4♂31	18°28	14°36	11°56	14°35	14°33	29°51	29°44	15°35	8° 3	8°49	10° 3	0°56	W19
T 20	15 50 56	28°56'42	16°20	20°32	15°42	11°54	14°42	14°36	29°54	29°45	15°36	8° 1	8°46	10°10	1° 0	T 20
F 21	15 54 53	29°54'19	28°14	22°38	16°49	11°52	14°49	14°40	29°58	29°45	15°37	7°58	8°43	10°16	1° 3	F 21
S 22	15 58 50	0♂51'55	10♂17	24°46	17°56	11°D51	14°56	14°44	0♂1	29°46	15°38	7°52	8°40	10°23	1° 7	S 22
S 23	16 2 46	1°49'30	22°32	26°55	19° 3	11°52	15° 4	14°47	0° 4	29°46	15°39	7°43	8°36	10°30	1°10	S 23
M24	16 6 43	2°47'04	5♂3	29° 4	20°10	11°52	15°11	14°51	0° 7	29°46	15°40	7°33	8°33	10°36	1°14	M24
T 25	16 10 39	3°44'37	17°51	1♂15	21°17	11°54	15°19	14°55	0°10	29°47	15°42	7°22	8°30	10°43	1°17	T 25
W26	16 14 36	4°42'09	0♂55	3°27	22°24	11°57	15°26	14°59	0°13	29°47	15°43	7°12	8°27	10°50	1°21	W26
T 27	16 18 32	5°39'40	14°15	5°39	23°32	12° 0	15°34	15° 4	0°16	29°47	15°44	7° 2	8°24	10°56	1°24	T 27
F 28	16 22 29	6°37'10	27°48	7°51	24°40	12° 4	15°42	15° 8	0°19	29°47	15°45	6°55	8°21	11° 3	1°27	F 28
S 29	16 26 25	7°34'39	11♂33	10° 3	25°47	12° 8	15°50	15°12	0°22	29°47	15°47	6°50	8°17	11°10	1°31	S 29
S 30	16 30 22	8°32'07	25°26	12°14	26°55	12°14	15°58	15°16	0°25	29°47	15°48	6°47	8°14	11°16	1°34	S 30
M31	16 34 19	9♂29'33	9♂25	14♂25	28♂3	12♂20	16♂7	15♂21	0♂27	29♂47	15♂49	6°D47	8♂11	11♂23	1♂37	M31

Delta T = 21.81 sec

Greg. Calendar

JUNE 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 38 15	10♂26'58	23♂29	16♂35	29♂11	12♂27	16♂15	15♂26	0♂30	29♂47	15♂51	6♂47	8♂8	11♂30	1♂41	T 1
W 2	16 42 12	11°24'22	7♂37	18°44	0♂19	12°34	16°23	15°30	0°33	29°47	15°52	6°R48	8° 5	11°36	1°44	W 2
T 3	16 46 8	12°21'45	21°47	20°51	1°27	12°43	16°32	15°35	0°36	29°47	15°53	6°48	8° 2	11°43	1°47	T 3
F 4	16 50 5	13°19'07	5♂58	22°57	2°36	12°52	16°41	15°40	0°39	29°47	15°55	6°45	7°58	11°50	1°50	F 4
S 5	16 54 1	14°16'28	20° 7	25° 1	3°44	13° 1	16°50	15°45	0°41	29°47	15°56	6°41	7°55	11°56	1°53	S 5
S 6	16 57 58	15°13'47	4♂12	27° 3	4°52	13°11	16°59	15°49	0°44	29°47	15°57	6°35	7°52	12° 3	1°56	S 6
M 7	17 1 54	16°11'06	18° 9	29° 3	6° 1	13°22	17° 8	15°54	0°47	29°47	15°59	6°28	7°49	12°10	1°59	M 7
T 8	17 5 51	17° 8'24	1♂55	1♂5	7°10	13°34	17°17	16° 0	0°49	29°47	16° 0	6°19	7°46	12°16	2° 2	T 8
W 9	17 9 48	18° 5'41	15°25	2°57	8°18	13°46	17°26	16° 5	0°52	29°47	16° 2	6°12	7°42	12°23	2° 5	W 9
T 10	17 13 44	19° 2'57	28°39	4°50	9°27	13°59	17°35	16°10	0°54	29°46	16° 3	6° 5	7°39	12°30	2° 8	T 10
F 11	17 17 41	20° 0'13	11♂34	6°41	10°36	14°12	17°45	16°15	0°57	29°46	16° 5	6° 1	7°36	12°36	2°11	F 11
S 12	17 21 37	20°57'29	24°10	8°30	11°45	14°26	17°54	16°21	0°59	29°46	16° 6	5°58	7°33	12°43	2°14	S 12
S 13	17 25 34	21°54'44	6♂31	10°17	12°54	14°40	18° 4	16°26	1° 2	29°45	16° 7	5°D58	7°30	12°50	2°17	S 13
M14	17 29 30	22°51'59	18°37	12° 1	14° 3	14°55	18°14	16°32	1° 4	29°45	16° 9	5°58	7°27	12°56	2°20	M14
T 15	17 33 27	23°49'13	0♂33	13°43	15°13	15°11	18°24	16°37	1° 7	29°45	16°10	6° 0	7°23	13° 3	2°22	T 15
W16	17 37 24	24°46'27	12°24	15°22	16°22	15°27	18°34	16°43	1° 9	29°44	16°12	6° 1	7°20	13°10	2°25	W16
T 17	17 41 20	25°43'41	24°15	16°59	17°31	15°44	18°44	16°48	1°11	29°44	16°13	6°R 2	7°17	13°16	2°28	T 17
F 18	17 45 17	26°40'55	6♂10	18°34	18°41	16° 1	18°54	16°54	1°14	29°43	16°15	6° 1	7°14	13°23	2°30	F 18
S 19	17 49 13	27°38'08	18°15	20° 6	19°50	16°19	19° 4	17° 0	1°16	29°43	16°16	5°59	7°11	13°30	2°33	S 19
S 20	17 53 10	28°35'22	0♂34	21°36	21° 0	16°37	19°14	17° 6	1°18	29°42	16°18	5°56	7° 8	13°36	2°36	S 20
M21	17 57 6	29°32'36	13°10	23° 3	22°10	16°56	19°25	17°12	1°20	29°42	16°19	5°51	7° 4	13°43	2°38	M21
T 22	18 1 3	0♂29'49	26° 6	24°27	23°20	17°15	19°35	17°18	1°23	29°41	16°21	5°45	7° 1	13°50	2°41	T 22
W23	18 4 59	1°27'03	9♂23	25°50	24°30	17°35	19°46	17°24	1°25	29°40	16°23	5°40	6°58	13°56	2°43	W23
T 24	18 8 56	2°24'16	23° 0	27° 9	25°39	17°55	19°56	17°30	1°27	29°40	16°24	5°35	6°55	14° 3	2°45	T 24
F 25	18 12 53	3°21'29	6♂55	28°26	26°49	18°15	20° 7	17°36	1°29	29°39	16°26	5°31	6°52	14°10	2°48	F 25
S 26	18 16 49	4°18'43	21° 4	29°40	28° 0	18°36	20°18	17°42	1°31	29°38	16°27	5°29	6°48	14°17	2°50	S 26
S 27	18 20 46	5°15'56	5♂23	0♂52	29°10	18°58	20°28	17°49	1°33	29°37	16°29	5°D28	6°45	14°23	2°52	S 27
M28	18 24 42	6°13'08	19°47	2° 1	0♂20	19°20	20°39	17°55	1°35	29°37	16°30	5°29	6°42	14°30	2°55	M28
T 29	18 28 39	7°10'21	4♂11	3° 7	1°30	19°42	20°50	18° 1	1°37	29°36	16°32	5°30	6°39	14°37	2°57	T 29
W30	18 32 35	8°5'733	18♂32	4♂10	2♂40	20♂5	21♂1	18♂8	1♂38	29♂35	16♂33	5♂31	6♂36	14♂43	2♂59	W30

Delta T = 21.76 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1683

geocentric

JULY 1683 GC

00:00 UT

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

Delta T = 21.72 sec

Greg. Calendar

AUGUST 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 38 45	8♂40'48	25♂ 6	3°R59	10♂42	5♂14	27♂25	21♂54	2♂13	28°R56	17♂23	5♂17	4♂54	18♂17	3♂39	S 1
M 2	20 42 42	9°38'16	8♂24	3♂20	11°54	5°47	27°38	22° 2	2°13	28♂54	17°25	5°17	4°51	18°24	3°39	M 2
T 3	20 46 38	10°35'46	21°24	2°46	13° 6	6°20	27°51	22° 9	2°13	28°53	17°26	5°18	4°48	18°30	3°40	T 3
W 4	20 50 35	11°33'16	4♂ 9	2°16	14°19	6°54	28° 3	22°17	2°14	28°51	17°28	5°18	4°45	18°37	3°40	W 4
T 5	20 54 31	12°30'47	16°41	1°51	15°31	7°28	28°16	22°24	2°14	28°50	17°29	5°19	4°41	18°44	3°40	T 5
F 6	20 58 28	13°28'20	29° 1	1°31	16°43	8° 2	28°29	22°32	2°14	28°48	17°31	5°19	4°38	18°50	3°40	F 6
S 7	21 2 24	14°25'53	11♂12	1°18	17°56	8°36	28°42	22°40	2°R14	28°46	17°32	5°R19	4°35	18°57	3°R40	S 7
S 8	21 6 21	15°23'27	23°14	1°D12	19° 8	9°10	28°54	22°47	2°14	28°45	17°34	5°19	4°32	19° 4	3°40	S 8
M 9	21 10 18	16°21'03	5♂ 9	1°12	20°21	9°44	29° 7	22°55	2°14	28°43	17°35	5°18	4°29	19°10	3°40	M 9
T 10	21 14 14	17°18'40	17° 1	1°20	21°34	10°19	29°20	23° 2	2°14	28°42	17°37	5°16	4°26	19°17	3°40	T 10
W 11	21 18 11	18°16'18	28°51	1°34	22°46	10°54	29°33	23°10	2°13	28°40	17°38	5°14	4°22	19°24	3°40	W 11
T 12	21 22 7	19°13'58	10°V42	1°56	23°59	11°29	29°46	23°18	2°13	28°38	17°39	5°12	4°19	19°30	3°40	T 12
F 13	21 26 4	20°11'39	22°37	2°25	25°12	12° 5	29°59	23°25	2°13	28°37	17°41	5°11	4°16	19°37	3°39	F 13
S 14	21 30 0	21° 9'22	4♂41	3° 2	26°25	12°40	0♂12	23°33	2°13	28°35	17°42	5° 9	4°13	19°44	3°39	S 14
S 15	21 33 57	22° 7'07	16°57	3°46	27°38	13°16	0°25	23°41	2°12	28°34	17°43	5°D 8	4°10	19°50	3°39	S 15
M 16	21 37 53	23° 4'53	29°30	4°37	28°51	13°52	0°38	23°48	2°12	28°32	17°45	5° 9	4° 6	19°57	3°38	M 16
T 17	21 41 50	24° 2'41	12°II23	5°35	0♂ 4	14°28	0°51	23°56	2°11	28°30	17°46	5° 9	4° 3	20° 4	3°38	T 17
W 18	21 45 47	25° 0'30	25°39	6°39	1°17	15° 4	1° 4	24° 4	2°11	28°29	17°47	5°11	4° 0	20°11	3°37	W 18
T 19	21 49 43	25°58'22	9♂23	7°50	2°30	15°41	1°17	24°11	2°10	28°27	17°49	5°12	3°57	20°17	3°36	T 19
F 20	21 53 40	26°56'15	23°32	9° 6	3°43	16°17	1°30	24°19	2°10	28°25	17°50	5°13	3°54	20°24	3°36	F 20
S 21	21 57 36	27°54'10	8♂ 7	10°29	4°56	16°54	1°43	24°27	2° 9	28°24	17°51	5°R13	3°51	20°31	3°35	S 21
S 22	22 1 33	28°52'06	23° 1	11°56	6° 9	17°31	1°56	24°34	2° 9	28°22	17°53	5°12	3°47	20°37	3°34	S 22
M 23	22 5 29	29°50'04	8♂ 8	13°29	7°23	18° 8	2° 9	24°42	2° 8	28°20	17°54	5°10	3°44	20°44	3°33	M 23
T 24	22 9 26	0♂48'04	23°17	15° 5	8°36	18°46	2°22	24°49	2° 7	28°19	17°55	5° 8	3°41	20°51	3°32	T 24
W 25	22 13 22	1°46'05	8♂20	16°46	9°49	19°23	2°35	24°57	2° 6	28°17	17°56	5° 4	3°38	20°57	3°31	W 25
T 26	22 17 19	2°44'07	23° 8	18°30	11° 3	20° 1	2°48	25° 5	2° 5	28°15	17°58	5° 0	3°35	21° 4	3°30	T 26
F 27	22 21 16	3°42'11	7♂134	20°17	12°16	20°39	3° 1	25°12	2° 4	28°14	17°59	4°57	3°31	21°11	3°29	F 27
S 28	22 25 12	4°40'16	21°36	22° 6	13°30	21°17	3°14	25°20	2° 3	28°12	18° 0	4°55	3°28	21°17	3°28	S 28
S 29	22 29 9	5°38'22	5♂12	23°57	14°43	21°55	3°27	25°27	2° 2	28°11	18° 1	4°D55	3°25	21°24	3°27	S 29
M 30	22 33 5	6°36'30	18°23	25°50	15°57	22°33	3°40	25°35	2° 1	28° 9	18° 2	4°55	3°22	21°31	3°26	M 30
T 31	22 37 2	7♂34'40	1♂13	27♂45	17♂11	23♂12	3♂53	25♂43	2♂ 0	28♂ 7	18♂ 3	4♂57	3♂19	21♂37	3♂24	T 31

ASTRODIENST EPHEMERIS for the year 1683
geocentric

SEPTEMBER 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	22 40 58	8♍32'51	13♌45	29♏40	18♏24	23♍50	4♍6	25♏50	1♑R59	28♑6	18♌4	4♏58	3♏16	21♋44	3♑R23	W 1
T 2	22 44 55	9°31'03	26° 3	1♍35	19°38	24°29	4°19	25°58	1♌58	28♌4	18° 5	5° 0	3°12	21°51	3♌22	T 2
F 3	22 48 51	10°29'17	8♌10	3°31	20°52	25° 8	4°32	26° 5	1°57	28° 3	18° 7	5°R 0	3° 9	21°58	3°20	F 3
S 4	22 52 48	11°27'33	20° 9	5°27	22° 6	25°47	4°45	26°13	1°55	28° 1	18° 8	4°59	3° 6	22° 4	3°19	S 4
S 5	22 56 45	12°25'50	2♋3	7°22	23°20	26°26	4°58	26°20	1°54	27°59	18° 9	4°56	3° 3	22°11	3°17	S 5
M 6	23 0 41	13°24'09	13°55	9°17	24°33	27° 6	5°11	26°27	1°53	27°58	18°10	4°51	3° 0	22°18	3°16	M 6
T 7	23 4 38	14°22'30	25°45	11°12	25°47	27°45	5°24	26°35	1°51	27°56	18°11	4°45	2°57	22°24	3°14	T 7
W 8	23 8 34	15°20'53	7♑37	13° 6	27° 1	28°25	5°37	26°42	1°50	27°55	18°12	4°37	2°53	22°31	3°12	W 8
T 9	23 12 31	16°19'18	19°31	14°59	28°15	29° 5	5°50	26°50	1°48	27°53	18°13	4°29	2°50	22°38	3°10	T 9
F 10	23 16 27	17°17'44	1♌29	16°51	29°29	29°45	6° 3	26°57	1°47	27°52	18°13	4°22	2°47	22°44	3° 9	F 10
S 11	23 20 24	18°16'13	13°36	18°43	0♍44	0♌25	6°16	27° 4	1°45	27°50	18°14	4°16	2°44	22°51	3° 7	S 11
S 12	23 24 20	19°14'44	25°52	20°33	1°58	1° 5	6°29	27°12	1°44	27°49	18°15	4°11	2°41	22°58	3° 5	S 12
M13	23 28 17	20°13'17	8♍23	22°23	3°12	1°45	6°42	27°19	1°42	27°47	18°16	4° 8	2°37	23° 4	3° 3	M13
T 14	23 32 13	21°11'53	21°11	24°12	4°26	2°26	6°54	27°26	1°40	27°46	18°17	4°D 8	2°34	23°11	3° 1	T 14
W15	23 36 10	22°10'31	4♌20	25°59	5°40	3° 6	7° 7	27°33	1°39	27°44	18°18	4° 8	2°31	23°18	2°59	W15
T 16	23 40 7	23° 9'11	17°54	27°46	6°55	3°47	7°20	27°41	1°37	27°43	18°19	4° 9	2°28	23°25	2°57	T 16
F 17	23 44 3	24° 7'53	1♏55	29°31	8° 9	4°28	7°33	27°48	1°35	27°41	18°19	4°R10	2°25	23°31	2°55	F 17
S 18	23 48 0	25° 6'37	16°23	1♌16	9°23	5° 9	7°46	27°55	1°33	27°40	18°20	4° 9	2°22	23°38	2°53	S 18
S 19	23 51 56	26° 5'24	1♍14	3° 0	10°38	5°50	7°58	28° 2	1°31	27°38	18°21	4° 7	2°18	23°45	2°50	S 19
M20	23 55 53	27° 4'12	16°23	4°42	11°52	6°31	8°11	28° 9	1°30	27°37	18°22	4° 2	2°15	23°51	2°48	M20
T 21	23 59 49	28° 3'03	1♌40	6°24	13° 7	7°12	8°24	28°16	1°28	27°36	18°22	3°55	2°12	23°58	2°46	T 21
W22	0 3 46	29° 1'56	16°55	8° 5	14°21	7°54	8°36	28°23	1°26	27°34	18°23	3°47	2° 9	24° 5	2°44	W22
T 23	0 7 42	0♌0'50	1♍57	9°44	15°36	8°35	8°49	28°30	1°24	27°33	18°24	3°38	2° 6	24°11	2°41	T 23
F 24	0 11 39	0°59'47	16°56	11°23	16°50	9°17	9° 1	28°37	1°22	27°32	18°24	3°30	2° 3	24°18	2°39	F 24
S 25	0 15 36	1°58'45	0♌48	13° 1	18° 5	9°59	9°14	28°44	1°20	27°30	18°25	3°24	1°59	24°25	2°36	S 25
S 26	0 19 32	2°57'45	14°31	14°39	19°20	10°40	9°26	28°50	1°18	27°29	18°25	3°21	1°56	24°31	2°34	S 26
M27	0 23 29	3°56'47	27°45	16°15	20°34	11°22	9°39	28°57	1°15	27°28	18°26	3°19	1°53	24°38	2°31	M27
T 28	0 27 25	4°55'51	10♌33	17°50	21°49	12° 5	9°51	29° 4	1°13	27°27	18°27	3°D19	1°50	24°45	2°29	T 28
W29	0 31 22	5°54'56	23° 1	19°25	23° 4	12°47	10° 4	29°10	1°11	27°25	18°27	3°20	1°47	24°52	2°26	W29
T 30	0 35 18	6♌54'03	5♌12	20♌59	24♍19	13♌29	10♍16	29♏17	1♑R 9	27♌24	18♌28	3°R20	1♏43	24♋58	2♌24	T 30

Delta T = 21.63 sec

Greg. Calendar

OCTOBER 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	0 39 15	7♌53'12	17♌12	22♌32	25♍33	14♌12	10♍28	29♏24	1♑R 7	27♑R23	18♌28	3°R19	1♏40	25♋5	2°R21	F 1
S 2	0 43 11	8°52'23	29° 5	24° 4	26°48	14°54	10°40	29°30	1♌5	27♌22	18°28	3♏16	1°37	25°12	2♌18	S 2
S 3	0 47 8	9°51'36	10♋55	25°35	28° 3	15°37	10°53	29°37	1° 2	27°21	18°29	3°10	1°34	25°18	2°16	S 3
M 4	0 51 5	10°50'50	22°45	27° 6	29°18	16°19	11° 5	29°43	1° 0	27°20	18°29	3° 1	1°31	25°25	2°13	M 4
T 5	0 55 1	11°50'06	4♑37	28°36	0♌33	17° 2	11°17	29°49	0°58	27°19	18°30	2°50	1°28	25°32	2°10	T 5
W 6	0 58 58	12°49'25	16°33	0♍5	1°48	17°45	11°29	29°56	0°56	27°18	18°30	2°38	1°24	25°38	2° 7	W 6
T 7	1 2 54	13°48'46	28°34	1°33	3° 2	18°28	11°41	0♍2	0°53	27°17	18°30	2°24	1°21	25°45	2° 5	T 7
F 8	1 6 51	14°48'08	10♌41	3° 1	4°17	19°11	11°53	0° 8	0°51	27°16	18°31	2°11	1°18	25°52	2° 2	F 8
S 9	1 10 47	15°47'33	22°55	4°27	5°32	19°54	12° 4	0°14	0°49	27°15	18°31	2° 0	1°15	25°58	1°59	S 9
S 10	1 14 44	16°47'00	5♍19	5°53	6°47	20°38	12°16	0°20	0°46	27°14	18°31	1°51	1°12	26° 5	1°56	S 10
M11	1 18 40	17°46'30	17°54	7°18	8° 2	21°21	12°28	0°26	0°44	27°13	18°31	1°45	1° 8	26°12	1°53	M11
T 12	1 22 37	18°46'02	0♌44	8°42	9°17	22° 5	12°40	0°32	0°41	27°12	18°32	1°42	1° 5	26°19	1°50	T 12
W13	1 26 30	19°45'36	13°50	10° 6	10°32	22°48	12°51	0°38	0°39	27°11	18°32	1°41	1° 2	26°25	1°47	W13
T 14	1 30 33	20°45'12	27°16	11°28	11°47	23°32	13° 3	0°44	0°37	27°10	18°32	1°41	0°59	26°32	1°45	T 14
F 15	1 34 27	21°44'51	11♏5	12°49	13° 3	24°15	13°14	0°50	0°34	27° 9	18°32	1°40	0°56	26°39	1°42	F 15
S 16	1 38 23	22°44'32	25°18	14°10	14°18	24°59	13°26	0°56	0°32	27° 9	18°32	1°39	0°53	26°45	1°39	S 16
S 17	1 42 20	23°44'15	9♍54	15°29	15°33	25°43	13°37	1° 1	0°29	27° 8	18°32	1°35	0°49	26°52	1°36	S 17
M18	1 46 16	24°44'00	24°49	16°47	16°48	26°27	13°49	1° 7	0°27	27° 7	18°32	1°28	0°46	26°59	1°33	M18
T 19	1 50 13	25°43'48	9♌56	18° 4	18° 3	27°11	14° 0	1°12	0°24	27° 7	18°R32	1°19	0°43	27° 5	1°30	T 19
W20	1 54 9	26°43'37	25° 6	19°19	19°18	27°55	14°11	1°18	0°22	27° 6	18°32	1° 7	0°40	27°12	1°27	W20
T 21	1 58 6	27°43'29	10♍7	20°33	20°34	28°40	14°22	1°23	0°19	27° 5	18°32	0°56	0°37	27°19	1°24	T 21
F 22	2 2 2	28°43'23	24°51	21°45	21°49	29°24	14°33	1°28	0°17	27° 5	18°32	0°45	0°34	27°26	1°21	F 22
S 23	2 5 59	29°43'18	9♌9	22°56	23° 4	0♌8	14°44	1°33	0°15	27° 4	18°32	0°36	0°30	27°32	1°18	S 23
S 24	2 9 56	0♍43'15	22°58	24° 5	24°19	0°53	14°55	1°39	0°12	27° 4	18°32	0°30	0°27	27°39	1°15	S 24
M25	2 13 52	1°43'14	6♌18	25°11	25°35	1°37	15° 6	1°44	0°10	27° 3	18°32	0°26	0°24	27°46	1°12	M25
T 26	2 17 49	2°43'15	19°10	26°15	26°50	2°22	15°16	1°49	0° 7	27° 3	18°32	0°25	0°21	27°52	1° 9	T 26
W27	2 21 45	3°43'17	1♌40	27°16	28° 5	3° 7	15°27	1°54	0° 5	27° 2	18°32	0°24	0°18	27°59	1° 6	W27
T 28	2 25 42	4°43'20	13°51	28°15	29°20	3°51	15°37	1°58	0° 2	27° 2	18°31	0°24	0°14	28° 6	1° 3	T 28
F 29	2 29 38	5°43'26	25°50	29°10	0♍36	4°36	15°48	2° 3	29♑59	27° 1	18°31	0°23	0°11	28°12	1° 0	F 29
S 30	2 33 35	6°43'32	7♋42	0♌1	1°51	5°21	15°58	2° 8	29°57	27° 1	18°31	0°19	0° 8	28°19	0°57	S 30
S 31	2 37 31	7♍43'41	19♋31	0♌48	3♍6	6♌6	16♍8	2♍12	29♑55	27♌1	18♌31	0♏13	0♏5	28♋26	0♌54	S 31

Delta T = 21.58 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1683
geocentric

NOVEMBER 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	2 41 28	8♂43'51	1♀22	1♂31	4♂22	6♂51	16♂19	2♂17	29°R52	27°R 1	18°R30	0°R 4	0♂ 2	28♂33	0°R51	M 1
T 2	2 45 25	9°44'02	13°17	2° 9	5°37	7°36	16°29	2°21	29°Y50	27°≈ 0	18°≈30	29°≈53	29°≈59	28°39	0♂48	T 2
W 3	2 49 21	10°44'16	25°20	2°40	6°52	8°21	16°39	2°26	29°48	27° 0	18°30	29°39	29°55	28°46	0°45	W 3
T 4	2 53 18	11°44'31	7♂30	3° 6	8° 8	9° 6	16°49	2°30	29°45	27° 0	18°29	29°25	29°52	28°53	0°42	T 4
F 5	2 57 14	12°44'48	19°50	3°24	9°23	9°51	16°58	2°34	29°43	27° 0	18°29	29°12	29°49	28°59	0°39	F 5
S 6	3 1 11	13°45'06	2♂19	3°34	10°38	10°37	17° 8	2°38	29°40	27° 0	18°28	28°59	29°46	29° 6	0°36	S 6
S 7	3 5 7	14°45'27	14°58	3°R37	11°54	11°22	17°18	2°42	29°38	27° 0	18°28	28°50	29°43	29°13	0°33	S 7
M 8	3 9 4	15°45'49	27°47	3°30	13° 9	12° 8	17°27	2°46	29°36	27°D 0	18°27	28°43	29°40	29°20	0°30	M 8
T 9	3 13 0	16°46'13	10♂48	3°13	14°24	12°53	17°36	2°50	29°33	27° 0	18°27	28°40	29°36	29°26	0°28	T 9
W10	3 16 57	17°46'39	24° 1	2°46	15°40	13°38	17°46	2°53	29°31	27° 0	18°26	28°D38	29°33	29°33	0°25	W10
T 11	3 20 54	18°47'07	7♂29	2° 9	16°55	14°24	17°55	2°57	29°29	27° 0	18°26	28°38	29°30	29°40	0°22	T 11
F 12	3 24 50	19°47'37	21°13	1°22	18°11	15°10	18° 4	3° 0	29°26	27° 0	18°25	28°R39	29°27	29°46	0°19	F 12
S 13	3 28 47	20°48'08	5♂14	0°25	19°26	15°55	18°13	3° 4	29°24	27° 0	18°25	28°38	29°24	29°53	0°16	S 13
S 14	3 32 43	21°48'42	19°32	29♂19	20°41	16°41	18°22	3° 7	29°22	27° 0	18°24	28°35	29°20	29°59	0°14	S 14
M15	3 36 40	22°49'17	4♂ 6	28° 7	21°57	17°27	18°30	3°10	29°20	27° 1	18°24	28°29	29°17	0°Y 6	0°11	M15
T 16	3 40 36	23°49'54	18°49	26°48	23°12	18°13	18°39	3°13	29°18	27° 1	18°23	28°21	29°14	0°13	0° 8	T 16
W17	3 44 33	24°50'33	3♂37	25°27	24°28	18°58	18°47	3°17	29°15	27° 1	18°22	28°12	29°11	0°20	0° 6	W17
T 18	3 48 29	25°51'13	18°21	24° 6	25°43	19°44	18°56	3°19	29°13	27° 1	18°22	28° 1	29° 8	0°27	0° 3	T 18
F 19	3 52 26	26°51'54	2♂52	22°46	26°59	20°30	19° 4	3°22	29°11	27° 2	18°21	27°52	29° 5	0°33	0° 0	F 19
S 20	3 56 23	27°52'38	17° 3	21°32	28°14	21°16	19°12	3°25	29° 9	27° 2	18°20	27°44	29° 1	0°40	29°Y58	S 20
S 21	4 0 19	28°53'22	0♂51	20°26	29°30	22° 2	19°20	3°28	29° 7	27° 3	18°19	27°38	28°58	0°47	29°55	S 21
M22	4 4 16	29°54'08	14°12	19°28	0♂45	22°49	19°28	3°30	29° 5	27° 3	18°19	27°35	28°55	0°53	29°53	M22
T 23	4 8 12	0♂54'54	27° 8	18°41	2° 0	23°35	19°35	3°32	29° 3	27° 3	18°18	27°D34	28°52	1° 0	29°50	T 23
W24	4 12 9	1°55'42	9♂41	18° 6	3°16	24°21	19°43	3°35	29° 1	27° 4	18°17	27°34	28°49	1° 7	29°48	W24
T 25	4 16 5	2°56'31	21°56	17°41	4°31	25° 7	19°50	3°37	28°59	27° 5	18°16	27°35	28°46	1°14	29°45	T 25
F 26	4 20 2	3°57'20	3♂58	17°29	5°47	25°53	19°58	3°39	28°57	27° 5	18°15	27°R36	28°42	1°20	29°43	F 26
S 27	4 23 58	4°58'11	15°51	17°D27	7° 2	26°39	20° 5	3°41	28°55	27° 6	18°14	27°35	28°39	1°27	29°41	S 27
S 28	4 27 55	5°59'02	27°42	17°36	8°18	27°26	20°12	3°43	28°53	27° 6	18°14	27°32	28°36	1°34	29°38	S 28
M29	4 31 52	6°59'54	9°Y34	17°54	9°33	28°12	20°19	3°45	28°52	27° 7	18°13	27°27	28°33	1°40	29°36	M29
T 30	4 35 48	8♂ 0'47	21°Y32	18♂21	10♂49	28♂58	20♂25	3♂46	28°Y50	27°≈ 8	18°≈12	27°≈20	28°≈30	1°Y47	29°Y34	T 30

Delta T = 21.54 sec

Greg. Calendar

DECEMBER 1683 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	4 39 45	9♂ 1'41	3♂40	18♂56	12♂ 4	29♂45	20♂32	3♂48	28°R48	27°≈ 9	18°R11	27°R12	28°≈26	1°Y54	29°R32	W 1
T 2	4 43 41	10° 2'36	15°59	19°38	13°20	0♂31	20°38	3°49	28°Y46	27° 9	18°≈10	27°≈ 3	28°23	2° 0	29°Y30	T 2
F 3	4 47 38	11° 3'31	28°32	20°27	14°35	1°18	20°45	3°51	28°45	27°10	18° 9	26°54	28°20	2° 7	29°28	F 3
S 4	4 51 34	12° 4'28	11♂18	21°20	15°50	2° 4	20°51	3°52	28°43	27°11	18° 8	26°46	28°17	2°14	29°26	S 4
S 5	4 55 31	13° 5'26	24°17	22°19	17° 6	2°51	20°57	3°53	28°42	27°12	18° 7	26°40	28°14	2°21	29°24	S 5
M 6	4 59 27	14° 6'24	7♂28	23°22	18°21	3°37	21° 3	3°54	28°40	27°13	18° 6	26°36	28°11	2°27	29°22	M 6
T 7	5 3 24	15° 7'24	20°51	24°28	19°37	4°24	21° 8	3°55	28°39	27°14	18° 5	26°D34	28° 7	2°34	29°20	T 7
W 8	5 7 21	16° 8'24	4♂25	25°38	20°52	5°10	21°14	3°56	28°37	27°15	18° 4	26°34	28° 4	2°41	29°18	W 8
T 9	5 11 17	17° 9'26	18° 8	26°50	22° 8	5°57	21°19	3°56	28°36	27°16	18° 3	26°35	28° 1	2°47	29°16	T 9
F 10	5 15 14	18°10'28	2♂ 0	28° 5	23°23	6°43	21°24	3°57	28°34	27°17	18° 2	26°37	27°58	2°54	29°15	F 10
S 11	5 19 10	19°11'32	16° 1	29°21	24°39	7°30	21°29	3°57	28°33	27°18	18° 1	26°R38	27°55	3° 1	29°13	S 11
S 12	5 23 7	20°12'36	0♂10	0♂40	25°54	8°16	21°34	3°58	28°32	27°19	17°59	26°37	27°51	3° 8	29°11	S 12
M13	5 27 3	21°13'42	14°25	2° 0	27°10	9° 3	21°39	3°58	28°31	27°20	17°58	26°35	27°48	3°14	29°10	M13
T 14	5 31 0	22°14'48	28°44	3°22	28°25	9°50	21°43	3°58	28°29	27°22	17°57	26°32	27°45	3°21	29° 8	T 14
W15	5 34 56	23°15'55	13♂ 3	4°45	29°40	10°36	21°48	3°R58	28°28	27°23	17°56	26°27	27°42	3°28	29° 7	W15
T 16	5 38 53	24°17'03	27°18	6° 9	0♂56	11°23	21°52	3°58	28°27	27°24	17°55	26°22	27°39	3°34	29° 5	T 16
F 17	5 42 50	25°18'11	11♂23	7°33	2°11	12°10	21°56	3°58	28°26	27°25	17°54	26°17	27°36	3°41	29° 4	F 17
S 18	5 46 46	26°19'21	25°13	8°59	3°27	12°57	22° 0	3°57	28°25	27°27	17°52	26°13	27°32	3°48	29° 3	S 18
S 19	5 50 43	27°20'30	8♂46	10°26	4°42	13°43	22° 3	3°57	28°24	27°28	17°51	26°10	27°29	3°55	29° 1	S 19
M20	5 54 39	28°21'40	21°58	11°53	5°58	14°30	22° 7	3°56	28°23	27°29	17°50	26°D 9	27°26	4° 1	29° 0	M20
T 21	5 58 36	29°22'50	4♂51	13°20	7°13	15°17	22°10	3°56	28°22	27°31	17°49	26° 9	27°23	4° 8	28°59	T 21
W22	6 2 32	0♂24'01	17°24	14°49	8°29	16° 3	22°13	3°55	28°22	27°32	17°48	26°10	27°20	4°15	28°58	W22
T 23	6 6 29	1°25'11	29°41	16°17	9°44	16°50	22°16	3°54	28°21	27°33	17°46	26°12	27°17	4°21	28°57	T 23
F 24	6 10 26	2°26'21	11♂45	17°47	10°59	17°37	22°19	3°53	28°20	27°35	17°45	26°14	27°13	4°28	28°56	F 24
S 25	6 14 22	3°27'31	23°40	19°16	12°15	18°24	22°21	3°52	28°19	27°36	17°44	26°15	27°10	4°35	28°55	S 25
S 26	6 18 19	4°28'41	5°Y32	20°46	13°30	19°11	22°24	3°51	28°19	27°38	17°43	26°R15	27° 7	4°42	28°54	S 26
M27	6 22 15	5°29'51	17°25	22°17	14°46	19°57	22°26	3°49	28°18	27°39	17°41	26°15	27° 4	4°48	28°53	M27
T 28	6 26 12	6°31'01	29°24	23°48	16° 1	20°44	22°28	3°48	28°18	27°41	17°40	26°13	27° 1	4°55	28°53	T 28
W29	6 30 8	7°32'10	11♂33	25°19	17°16	21°31	22°30	3°46	28°17	27°43	17°39	26°11	26°57	5° 2	28°52	W29
T 30	6 34 5	8°33'19	23°56	26°51	18°32	22°18	22°31	3°45	28°17	27°44	17°38	26° 8	26°54	5° 8	28°51	T 30
F 31	6 38 1	9♂34'28	6♂36	28♂23	19♂47	23°≈ 4	22♂33	3♂43	28°Y17	27°≈46	17°≈36	26°≈ 5	26°≈51	5°Y15	28°Y51	F 31

Delta T = 21.49 sec

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