



Astrodienst Ephemeris Tables for the year 2183

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 2183

geocentric

JANUARY 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 42 33	10°27'24	6°55	20°28' 9	9°38' 8	9°R37	21°11' 11	17°R24	14°55	14°36	28°R50	5°R24	5°39	29°R35	27°R 2	W 1
T 2	6 46 30	11°28'32	20°40	21°28	10°22	9°R21	21°18	17°R21	14°56	14°37	28°R48	5°R24	5°36	29°42	27°R 0	T 2
F 3	6 50 27	12°29'40	4°8' 9	22°49	11°37	9° 5	21°24	17°17	14°56	14°38	28°47	5°22	5°33	29°48	26°58	F 3
S 4	6 54 23	13°30'48	17°24	24°11	12°51	8°48	21°30	17°14	14°57	14°39	28°46	5°19	5°29	29°55	26°56	S 4
S 5	6 58 20	14°31'56	0°12	25°35	14° 5	8°30	21°36	17°10	14°57	14°41	28°45	5°12	5°26	0°12	26°54	S 5
M 6	7 2 16	15°33'04	13°18	26°59	15°19	8°11	21°41	17° 6	14°58	14°42	28°43	5° 2	5°23	0° 8	26°52	M 6
T 7	7 6 13	16°34'12	25°59	28°24	16°34	7°52	21°47	17° 2	14°59	14°44	28°42	4°50	5°20	0°15	26°50	T 7
W 8	7 10 9	17°35'19	8°29	29°49	17°48	7°32	21°52	16°59	15° 0	14°45	28°41	4°36	5°17	0°22	26°48	W 8
T 9	7 14 6	18°36'27	20°49	1°16	19° 2	7°12	21°58	16°55	15° 0	14°46	28°39	4°22	5°14	0°28	26°47	T 9
F 10	7 18 2	19°37'34	2°59	2°43	20°16	6°51	22° 3	16°51	15° 1	14°48	28°38	4° 9	5°10	0°35	26°45	F 10
S 11	7 21 59	20°38'42	15° 0	4°10	21°30	6°29	22° 8	16°46	15° 2	14°49	28°37	3°58	5° 7	0°42	26°43	S 11
S 12	7 25 56	21°39'49	26°54	5°39	22°44	6° 8	22°12	16°42	15° 3	14°51	28°36	3°49	5° 4	0°48	26°42	S 12
M 13	7 29 52	22°40'56	8°42	7° 8	23°58	5°45	22°17	16°38	15° 4	14°52	28°34	3°43	5° 1	0°55	26°40	M 13
T 14	7 33 49	23°42'03	20°29	8°37	25°12	5°23	22°21	16°34	15° 5	14°54	28°33	3°40	4°58	1° 2	26°39	T 14
W 15	7 37 45	24°43'10	2°19	10° 7	26°26	5° 0	22°26	16°30	15° 6	14°56	28°32	3°39	4°54	1° 9	26°38	W 15
T 16	7 41 42	25°44'17	14°16	11°37	27°40	4°36	22°30	16°25	15° 7	14°57	28°30	3°40	4°51	1°15	26°36	T 16
F 17	7 45 38	26°45'24	26°26	13° 8	28°54	4°13	22°33	16°21	15° 9	14°59	28°29	3°40	4°48	1°22	26°35	F 17
S 18	7 49 35	27°46'30	8°15	14°40	0°18	3°49	22°37	16°16	15°10	15° 0	28°28	3°39	4°45	1°29	26°34	S 18
S 19	7 53 31	28°47'37	21°46	16°12	1°21	3°25	22°41	16°12	15°11	15° 2	28°26	3°37	4°42	1°35	26°33	S 19
M 20	7 57 28	29°48'43	5°45	17°45	2°35	3° 1	22°44	16° 7	15°12	15° 4	28°25	3°32	4°39	1°42	26°32	M 20
T 21	8 1 25	0°49'50	18°53	19°18	3°49	2°37	22°47	16° 2	15°14	15° 6	28°24	3°25	4°35	1°49	26°31	T 21
W 22	8 5 21	1°50'56	3°11	20°51	5° 2	2°13	22°50	15°58	15°15	15° 7	28°22	3°15	4°32	1°55	26°30	W 22
T 23	8 9 18	2°52'01	17°53	22°26	6°16	1°49	22°53	15°53	15°17	15° 9	28°21	3° 5	4°29	2° 2	26°29	T 23
F 24	8 13 14	3°53'06	2°54	24° 0	7°30	1°25	22°56	15°48	15°18	15°11	28°20	2°56	4°26	2° 9	26°29	F 24
S 25	8 17 11	4°54'10	18° 2	25°36	8°43	1° 1	22°58	15°44	15°20	15°13	28°18	2°48	4°23	2°15	26°28	S 25
S 26	8 21 7	5°55'14	3° 9	27°11	9°57	0°37	23° 0	15°39	15°22	15°15	28°17	2°42	4°20	2°22	26°27	S 26
M 27	8 25 4	6°56'16	18° 5	28°48	11°10	0°14	23° 3	15°34	15°23	15°17	28°16	2°39	4°16	2°29	26°27	M 27
T 28	8 29 0	7°57'18	2°42	0°25	12°23	29°51	23° 4	15°29	15°25	15°18	28°15	2°38	4°13	2°35	26°26	T 28
W 29	8 32 57	8°58'18	16°58	2° 3	13°37	29°28	23° 6	15°24	15°27	15°20	28°13	2°38	4°10	2°42	26°26	W 29
T 30	8 36 54	9°59'18	0°50	3°41	14°50	29° 6	23° 8	15°19	15°29	15°22	28°12	2°39	4° 7	2°49	26°25	T 30
F 31	8 40 50	11°0'16	14°20	5°20	16°18	3° 2	28°54	23° 9	15°15	15°30	28°11	2°40	4° 4	2°55	26°25	F 31

Delta T = 147.29 sec

FEBRUARY 2183

00:00 UT

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

Delta T = 147.36 sec

ASTRODIENST EPHEMERIS for the year 2183

geocentric

MARCH 2183

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 35 10	10♋19'46	6♏58	26♋26	20♏50	22°R51	22°R26	13°R 0	16♏41	16♋26	27°R38	1°R24	2♏31	6♏8	26♋46	S 1
S 2	10 39 7	11°20'04	19°50	28° 0	22° 0	22°D51	22♏22	12♏55	16°44	16°29	27♏37	1♏24	2°28	6°15	26°48	S 2
M 3	10 43 3	12°20'20	2♏24	29°28	23°11	22♏51	22°18	12°52	16°47	16°31	27°36	1°23	2°25	6°22	26°50	M 3
T 4	10 47 0	13°20'35	14°42	0♏52	24°21	22°52	22°13	12°48	16°50	16°33	27°35	1°21	2°22	6°28	26°51	T 4
W 5	10 50 56	14°20'47	26°48	2°10	25°31	22°53	22° 8	12°44	16°53	16°36	27°35	1°18	2°19	6°35	26°53	W 5
T 6	10 54 53	15°20'57	8♏45	3°22	26°41	22°55	22° 4	12°40	16°56	16°38	27°34	1°15	2°16	6°42	26°55	T 6
F 7	10 58 49	16°21'06	20°37	4°28	27°51	22°58	21°59	12°36	16°59	16°40	27°33	1°13	2°12	6°48	26°57	F 7
S 8	11 2 46	17°21'12	2♏26	5°26	29° 0	23° 2	21°53	12°33	17° 2	16°42	27°32	1°11	2° 9	6°55	26°59	S 8
S 9	11 6 43	18°21'17	14°15	6°16	0♏10	23° 6	21°48	12°29	17° 5	16°45	27°31	1°10	2° 6	7° 2	27° 1	S 9
M10	11 10 39	19°21'19	26° 5	6°58	1°19	23°11	21°43	12°26	17° 8	16°47	27°31	1°D 9	2° 3	7° 8	27° 4	M10
T 11	11 14 36	20°21'20	7♏58	7°32	2°28	23°17	21°37	12°23	17°11	16°49	27°30	1° 9	2° 0	7°15	27° 6	T 11
W12	11 18 32	21°21'19	19°57	7°57	3°37	23°23	21°31	12°19	17°14	16°51	27°29	1°10	1°57	7°22	27° 8	W12
T 13	11 22 29	22°21'16	2♏5	8°13	4°46	23°30	21°26	12°16	17°18	16°54	27°29	1°10	1°53	7°28	27°10	T 13
F 14	11 26 25	23°21'12	14°23	8°R20	5°55	23°38	21°20	12°13	17°21	16°56	27°28	1°11	1°50	7°35	27°13	F 14
S 15	11 30 22	24°21'06	26°55	8°18	7° 3	23°46	21°13	12°10	17°24	16°58	27°27	1°12	1°47	7°42	27°15	S 15
S 16	11 34 18	25°20'58	9♏44	8° 8	8°12	23°55	21° 7	12° 7	17°27	17° 1	27°27	1°13	1°44	7°48	27°18	S 16
M17	11 38 15	26°20'49	22°53	7°49	9°20	24° 4	21° 1	12° 4	17°30	17° 3	27°26	1°R13	1°41	7°55	27°20	M17
T 18	11 42 12	27°20'38	6♏24	7°23	10°28	24°14	20°54	12° 2	17°34	17° 5	27°25	1°13	1°37	8° 2	27°23	T 18
W19	11 46 8	28°20'25	20°19	6°50	11°36	24°25	20°48	11°59	17°37	17° 7	27°25	1°13	1°34	8° 8	27°26	W19
T 20	11 50 5	29°20'11	4♏38	6°10	12°43	24°36	20°41	11°56	17°40	17°10	27°24	1°12	1°31	8°15	27°28	T 20
F 21	11 54 1	0♏19'55	19°18	5°25	13°51	24°47	20°34	11°54	17°44	17°12	27°24	1°12	1°28	8°22	27°31	F 21
S 22	11 57 58	1°19'37	4♋14	4°36	14°58	25° 0	20°28	11°52	17°47	17°14	27°23	1°D12	1°25	8°28	27°34	S 22
S 23	12 1 54	2°19'17	19°20	3°44	16° 5	25°12	20°21	11°49	17°50	17°16	27°23	1°12	1°22	8°35	27°37	S 23
M24	12 5 51	3°18'56	4♏26	2°50	17°12	25°25	20°14	11°47	17°54	17°18	27°22	1°R12	1°18	8°42	27°40	M24
T 25	12 9 47	4°18'32	19°23	1°55	18°19	25°39	20° 6	11°45	17°57	17°21	27°22	1°12	1°15	8°48	27°43	T 25
W26	12 13 44	5°18'06	4♏3	1° 1	19°25	25°53	19°59	11°43	18° 0	17°23	27°22	1°12	1°12	8°55	27°46	W26
T 27	12 17 40	6°17'38	18°21	0° 9	20°32	26° 8	19°52	11°41	18° 4	17°25	27°21	1°11	1° 9	9° 1	27°49	T 27
F 28	12 21 37	7°17'08	2♏12	29♋18	21°38	26°23	19°45	11°40	18° 7	17°27	27°21	1°11	1° 6	9° 8	27°52	F 28
S 29	12 25 34	8°16'36	15°37	28°32	22°43	26°39	19°37	11°38	18°10	17°29	27°21	1°10	1° 2	9°15	27°55	S 29
S 30	12 29 30	9°16'01	28°36	27°49	23°49	26°55	19°30	11°37	18°14	17°32	27°20	1° 9	0°59	9°21	27°58	S 30
M31	12 33 27	10♏15'24	11♏12	27♋11	24♏54	27♏11	19♏22	11♏35	18♏17	17♋34	27♏20	1°D 9	0♏56	9♏28	28♋1	M31

Delta T = 147.43 sec

APRIL 2183

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 23	11♏14'45	23♏30	26°R38	25♏59	27♏28	19°R15	11°R34	18♏21	17♋36	27°R20	1♏10	0♏53	9♏35	28♋5	T 1
W 2	12 41 20	12°14'04	5♏34	26♋10	27° 4	27°46	19♏ 7	11♏33	18°24	17°38	27♏20	1°10	0°50	9°41	28° 8	W 2
T 3	12 45 16	13°13'20	17°28	25°48	28° 9	28° 3	19° 0	11°32	18°27	17°40	27°19	1°11	0°47	9°48	28°11	T 3
F 4	12 49 13	14°12'34	29°17	25°32	29°13	28°21	18°52	11°31	18°31	17°42	27°19	1°13	0°43	9°55	28°15	F 4
S 5	12 53 9	15°11'45	11♏4	25°22	0♏17	28°40	18°44	11°30	18°34	17°44	27°19	1°14	0°40	10° 1	28°18	S 5
S 6	12 57 6	16°10'55	22°54	25°D17	1°20	28°59	18°36	11°29	18°38	17°46	27°19	1°15	0°37	10° 8	28°22	S 6
M 7	13 1 3	17°10'02	4♏49	25°18	2°24	29°18	18°29	11°28	18°41	17°48	27°19	1°R15	0°34	10°15	28°25	M 7
T 8	13 4 59	18° 9'07	16°50	25°24	3°27	29°38	18°21	11°28	18°45	17°50	27°19	1°14	0°31	10°21	28°29	T 8
W 9	13 8 56	19° 8'10	29° 2	25°36	4°29	29°58	18°13	11°27	18°48	17°52	27°19	1°12	0°28	10°28	28°32	W 9
T 10	13 12 52	20° 7'11	11♏24	25°52	5°32	0♏18	18° 6	11°27	18°51	17°54	27°D19	1°10	0°24	10°35	28°36	T 10
F 11	13 16 49	21° 6'11	23°57	26°13	6°34	0°39	17°58	11°27	18°55	17°56	27°19	1° 7	0°21	10°41	28°40	F 11
S 12	13 20 45	22° 5'08	6♏44	26°39	7°36	1° 0	17°50	11°27	18°58	17°58	27°19	1° 4	0°18	10°48	28°43	S 12
S 13	13 24 42	23° 4'04	19°46	27°10	8°37	1°21	17°43	11°D27	19° 2	18° 0	27°19	1° 1	0°15	10°55	28°47	S 13
M14	13 28 38	24° 2'58	3♏2	27°45	9°38	1°43	17°35	11°27	19° 5	18° 2	27°19	0°59	0°12	11° 1	28°51	M14
T 15	13 32 35	25° 1'50	16°34	28°23	10°39	2° 5	17°27	11°27	19° 9	18° 4	27°19	0°57	0° 8	11° 8	28°55	T 15
W16	13 36 32	26° 0'40	0♏23	29° 6	11°39	2°27	17°20	11°27	19°12	18° 6	27°19	0°D57	0° 5	11°15	28°59	W16
T 17	13 40 28	26°59'29	14°28	29°52	12°39	2°49	17°12	11°28	19°15	18° 8	27°19	0°58	0° 2	11°21	29° 2	T 17
F 18	13 44 25	27°58'16	28°49	0♏41	13°38	3°12	17° 5	11°28	19°19	18°10	27°20	0°59	29♏59	11°28	29° 6	F 18
S 19	13 48 21	28°57'02	13♋22	1°34	14°37	3°35	16°57	11°29	19°22	18°12	27°20	1° 1	29°56	11°34	29°10	S 19
S 20	13 52 18	29°55'45	28° 5	2°29	15°36	3°59	16°50	11°29	19°26	18°13	27°20	1°R 2	29°53	11°41	29°14	S 20
M21	13 56 14	0♏54'27	12♏51	3°28	16°34	4°22	16°42	11°30	19°29	18°15	27°20	1° 1	29°49	11°48	29°18	M21
T 22	14 0 11	1°53'07	27°33	4°30	17°31	4°46	16°35	11°31	19°32	18°17	27°21	0°59	29°46	11°54	29°22	T 22
W23	14 4 7	2°51'45	12♏5	5°34	18°29	5°11	16°28	11°32	19°36	18°19	27°21	0°56	29°43	12° 1	29°26	W23
T 24	14 8 4	3°50'21	26°20	6°41	19°25	5°35	16°21	11°34	19°39	18°21	27°21	0°51	29°40	12° 8	29°30	T 24
F 25	14 12 1	4°48'56	10♏13	7°50	20°21	6° 0	16°14	11°35	19°42	18°22	27°22	0°46	29°37	12°14	29°34	F 25
S 26	14 15 57	5°47'28	23°42	9° 2	21°17	6°25	16° 7	11°36	19°46	18°24	27°22	0°41	29°33	12°21	29°38	S 26
S 27	14 19 54	6°45'58	6♏45	10°16	22°12	6°50	16° 0	11°38	19°49	18°26	27°22	0°36	29°30	12°28	29°43	S 27
M28	14 23 50	7°44'26	19°25	11°32	23° 7	7°15	15°53	11°39	19°52	18°27	27°23	0°33	29°27	12°34	29°47	M28
T 29	14 27 47	8°42'52	1♏46	12°51	24° 1	7°41	15°47	11°41	19°56	18°29	27°23	0°31	29°24	12°41	29°51	T 29
W30	14 31 43	9♏41'15	13♏51	14♏12	24♏54	8♏ 7	15♏40	11♏43	19♏59	18♋31	27♏24	0°D31	29♏21	12♏48	29♋55	W30

Delta T = 147.50 sec

ASTRODIENST EPHEMERIS for the year 2183

geocentric

MAY 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 35 40	10♈39'37	25♊45	15♈34	25♊47	8♊33	15♈34	11♊45	20♈2	18♈32	27♈24	0♈32	29♈18	12♈54	29♈59	T 1
F 2	14 39 36	11°37'56	7♈34	16°59	26°39	8°59	15♈27	11°47	20°6	18°34	27°25	0°34	29°14	13°1	0♈3	F 2
S 3	14 43 33	12°36'14	19°22	18°26	27°30	9°26	15°21	11°49	20°9	18°35	27°25	0°35	29°11	13°8	0°8	S 3
S 4	14 47 29	13°34'29	1♈14	19°55	28°21	9°53	15°15	11°51	20°12	18°37	27°26	0°R36	29°8	13°14	0°12	S 4
M 5	14 51 26	14°32'43	13°14	21°25	29°11	10°20	15°9	11°53	20°15	18°38	27°27	0°35	29°5	13°21	0°16	M 5
T 6	14 55 23	15°30'54	25°26	22°58	29°59	10°47	15°3	11°56	20°18	18°40	27°27	0°32	29°2	13°28	0°20	T 6
W 7	14 59 19	16°29'04	7♈51	24°33	0♈48	11°14	14°57	11°58	20°22	18°41	27°28	0°27	28°59	13°34	0°25	W 7
T 8	15 3 16	17°27'12	20°30	26°9	1°35	11°42	14°52	12°1	20°25	18°42	27°29	0°20	28°55	13°41	0°29	T 8
F 9	15 7 12	18°25'18	3♈24	27°48	2°22	12°9	14°46	12°4	20°28	18°44	27°29	0°12	28°52	13°48	0°33	F 9
S 10	15 11 9	19°23'23	16°33	29°28	3°8	12°37	14°41	12°7	20°31	18°45	27°30	0°4	28°49	13°54	0°38	S 10
S 11	15 15 5	20°21'27	29°55	1♈10	3°53	13°5	14°36	12°10	20°34	18°46	27°31	29♈56	28°46	14°1	0°42	S 11
M 12	15 19 2	21°19'28	13♈29	2°55	4°37	13°34	14°31	12°13	20°37	18°48	27°32	29°49	28°43	14°7	0°46	M 12
T 13	15 22 58	22°17'29	27°13	4°41	5°19	14°2	14°26	12°16	20°40	18°49	27°32	29°44	28°39	14°14	0°51	T 13
W 14	15 26 55	23°15'28	11♈7	6°29	6°1	14°31	14°21	12°19	20°43	18°50	27°33	29°42	28°36	14°21	0°55	W 14
T 15	15 30 52	24°13'26	25°8	8°19	6°42	14°59	14°17	12°22	20°46	18°51	27°34	29°D41	28°33	14°27	1°0	T 15
F 16	15 34 48	25°11'22	9♈17	10°11	7°22	15°28	14°12	12°26	20°49	18°53	27°35	29°42	28°30	14°34	1°4	F 16
S 17	15 38 45	26°9'18	23°32	12°5	8°1	15°57	14°8	12°29	20°52	18°54	27°36	29°R42	28°27	14°41	1°8	S 17
S 18	15 42 41	27°7'12	7♈51	14°0	8°38	16°27	14°4	12°33	20°55	18°55	27°37	29°42	28°24	14°47	1°13	S 18
M 19	15 46 38	28°5'05	22°12	15°58	9°14	16°56	14°0	12°36	20°58	18°56	27°37	29°40	28°20	14°54	1°17	M 19
T 20	15 50 34	29°5'56	6♈30	17°58	9°49	17°26	13°56	12°40	21°1	18°57	27°38	29°36	28°17	15°1	1°22	T 20
W 21	15 54 31	0♈11	20°41	19°59	10°23	17°55	13°53	12°44	21°4	18°58	27°39	29°29	28°14	15°7	1°26	W 21
T 22	15 58 27	0°58'36	4♈39	22°2	10°55	18°25	13°49	12°48	21°6	18°59	27°40	29°20	28°11	15°14	1°30	T 22
F 23	16 2 24	1°56'23	18°21	24°7	11°26	18°55	13°46	12°52	21°9	19°0	27°41	29°10	28°8	15°21	1°35	F 23
S 24	16 6 21	2°54'09	1♈42	26°13	11°55	19°25	13°43	12°56	21°12	19°1	27°42	28°59	28°5	15°27	1°39	S 24
S 25	16 10 17	3°51'54	14°43	28°21	12°23	19°56	13°40	13°0	21°15	19°2	27°43	28°50	28°1	15°34	1°44	S 25
M 26	16 14 14	4°49'37	27°22	0♈29	12°49	20°26	13°37	13°4	21°17	19°3	27°44	28°42	27°58	15°41	1°48	M 26
T 27	16 18 10	5°47'19	9♈43	2°39	13°14	20°57	13°35	13°9	21°20	19°4	27°46	28°37	27°55	15°47	1°53	T 27
W 28	16 22 7	6°44'59	21°48	4°50	13°37	21°27	13°32	13°13	21°23	19°4	27°47	28°34	27°52	15°54	1°57	W 28
T 29	16 26 3	7°42'37	3♈43	7°2	13°58	21°58	13°30	13°18	21°25	19°5	27°48	28°D33	27°49	16°0	2°1	T 29
F 30	16 30 0	8°40'15	15°32	9°14	14°17	22°29	13°28	13°22	21°28	19°6	27°49	28°33	27°45	16°7	2°6	F 30
S 31	16 33 56	9♈37'50	27♈21	11♈25	14♈34	23♈0	13♈26	13♈27	21♈31	19♈7	27♈50	28°R33	27♈42	16♈14	2♈10	S 31

Delta T = 147.58 sec

JUNE 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 37 53	10♈35'24	9♈15	13♈37	14♈49	23♈31	13°R24	13♈32	21♈33	19♈7	27♈51	28°R33	27♈39	16♈20	2♈15	S 1
M 2	16 41 50	11°32'57	21°20	15°49	15°3	24°3	13♈23	13°37	21°36	19°8	27°52	28♈30	27°36	16°27	2°19	M 2
T 3	16 45 46	12°30'29	3♈39	17°59	15°14	24°34	13°22	13°42	21°38	19°9	27°54	28°26	27°33	16°34	2°23	T 3
W 4	16 49 43	13°27'59	16°15	20°9	15°23	25°6	13°20	13°47	21°40	19°9	27°55	28°19	27°30	16°40	2°28	W 4
T 5	16 53 39	14°25'28	29°10	22°17	15°30	25°38	13°19	13°52	21°43	19°10	27°56	28°9	27°26	16°47	2°32	T 5
F 6	16 57 36	15°22'56	12♈25	24°24	15°34	26°9	13°19	13°57	21°45	19°10	27°57	27°58	27°23	16°54	2°36	F 6
S 7	17 1 32	16°20'23	25°57	26°30	15°R37	26°41	13°18	14°2	21°48	19°11	27°58	27°46	27°20	17°0	2°41	S 7
S 8	17 5 29	17°17'49	9♈45	28°33	15°37	27°13	13°18	14°7	21°50	19°11	28°0	27°35	27°17	17°7	2°45	S 8
M 9	17 9 26	18°15'15	23°43	0♈35	15°34	27°45	13°17	14°13	21°52	19°12	28°1	27°25	27°14	17°14	2°49	M 9
T 10	17 13 22	19°12'39	7♈49	2°34	15°30	28°18	13°D17	14°18	21°54	19°12	28°2	27°18	27°11	17°20	2°54	T 10
W 11	17 17 19	20°10'03	21°57	4°31	15°23	28°50	13°17	14°23	21°56	19°13	28°4	27°14	27°7	17°27	2°58	W 11
T 12	17 21 15	21°7'27	6♈7	6°26	15°13	29°22	13°18	14°29	21°59	19°13	28°5	27°12	27°4	17°34	3°2	T 12
F 13	17 25 12	22°4'49	20°16	8°19	15°1	29°55	13°18	14°35	22°1	19°13	28°6	27°11	27°1	17°40	3°7	F 13
S 14	17 29 8	23°2'12	4♈22	10°9	14°47	0♈28	13°19	14°40	22°3	19°13	28°8	27°11	26°58	17°47	3°11	S 14
S 15	17 33 5	23°59'33	18°25	11°57	14°30	1°0	13°20	14°46	22°5	19°14	28°9	27°10	26°55	17°53	3°15	S 15
M 16	17 37 1	24°56'55	2♈24	13°42	14°11	1°33	13°21	14°52	22°7	19°14	28°11	27°7	26°51	18°0	3°19	M 16
T 17	17 40 58	25°54'16	16°18	15°25	13°50	2°6	13°22	14°58	22°9	19°14	28°12	27°2	26°48	18°7	3°23	T 17
W 18	17 44 55	26°51'36	0♈3	17°5	13°26	2°39	13°23	15°4	22°11	19°14	28°13	26°53	26°45	18°13	3°28	W 18
T 19	17 48 51	27°48'56	13°38	18°43	13°1	3°12	13°25	15°10	22°12	19°14	28°15	26°42	26°42	18°20	3°32	T 19
F 20	17 52 48	28°46'16	26°59	20°18	12°33	3°46	13°27	15°16	22°14	19°14	28°16	26°30	26°39	18°27	3°36	F 20
S 21	17 56 44	29°43'35	10♈5	21°51	12°4	4°19	13°28	15°22	22°16	19°14	28°18	26°17	26°36	18°33	3°40	S 21
S 22	18 0 41	0♈40'53	22°54	23°21	11°33	4°53	13°31	15°28	22°18	19°R14	28°19	26°6	26°32	18°40	3°44	S 22
M 23	18 4 37	1°38'11	5♈25	24°48	11°1	5°26	13°33	15°34	22°19	19°14	28°21	25°56	26°29	18°47	3°48	M 23
T 24	18 8 34	2°35'28	17°41	26°13	10°27	6°0	13°35	15°41	22°21	19°14	28°22	25°49	26°26	18°53	3°52	T 24
W 25	18 12 30	3°32'44	29°44	27°35	9°52	6°34	13°38	15°47	22°23	19°14	28°24	25°44	26°23	19°0	3°56	W 25
T 26	18 16 27	4°30'00	11♈37	28°55	9°15	7°7	13°41	15°53	22°24	19°14	28°25	25°42	26°20	19°7	4°0	T 26
F 27	18 20 24	5°27'15	23°26	0♈11	8°39	7°41	13°43	16°0	22°26	19°14	28°27	25°D41	26°17	19°13	4°4	F 27
S 28	18 24 20	6°24'29	5♈15	1°25	8°1	8°15	13°47	16°6	22°27	19°14	28°28	25°R41	26°13	19°20	4°8	S 28
S 29	18 28 17	7°21'43	17°9	2°36	7°24	8°49	13°50	16°13	22°29	19°14	28°30	25°41	26°10	19°27	4°12	S 29
M 30	18 32 13	8♈18'56	29♈15	3♈44	6♈46	9♈24	13♈53	16♈19	22♈30	19♈13	28♈31	25♈39	26♈7	19♈33	4♈16	M 30

Delta T = 147.65 sec

ASTRODIENST EPHEMERIS for the year 2183

geocentric

JULY 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 10	9 ⁵⁶ 16'09	11 ¹¹ 38	4 ¹² 49	6 ¹⁸ 9	9 ¹⁷ 58	13 ⁵⁷ 57	16 ¹² 26	22 ¹⁷ 31	19 ¹⁸ 13	28 ⁵³ 33	25 ¹⁸ 35	26 ¹⁷ 4	19 ¹⁷ 40	4 ¹¹ 20	T 1
W 2	18 40 6	10 ¹³ 22	24 ²⁰	5 ⁵¹	5 ⁵⁸ 32	10 ³²	14 ¹	16 ³³	22 ³³	19 ¹⁸ 13	28 ³⁴	25 ¹⁷ 29	26 ¹	19 ⁴⁶	4 ²⁴	W 2
T 3	18 44 3	11 ¹⁰ 34	7 ¹⁷ 25	6 ⁵⁰	4 ⁵⁶	11 ⁷	14 ⁵	16 ³⁹	22 ³⁴	19 ¹²	28 ³⁶	25 ²¹	25 ⁵⁷	19 ⁵³	4 ²⁷	T 3
F 4	18 47 59	12 ⁷ 45	20 ⁵⁴	7 ⁴⁶	4 ²⁰	11 ⁴¹	14 ⁹	16 ⁴⁶	22 ³⁵	19 ¹²	28 ³⁷	25 ¹⁰	25 ⁵⁴	20 ⁰	4 ³¹	F 4
S 5	18 51 56	13 ⁴ 57	4 ³⁸ 46	8 ³⁸	3 ⁴⁶	12 ¹⁶	14 ¹³	16 ⁵³	22 ³⁶	19 ¹²	28 ³⁹	25 ⁰	25 ⁵¹	20 ⁶	4 ³⁵	S 5
S 6	18 55 53	14 ² 08	18 ⁵⁶	9 ²⁷	3 ¹³	12 ⁵⁰	14 ¹⁷	17 ⁰	22 ³⁷	19 ¹¹	28 ⁴¹	24 ⁴⁹	25 ⁴⁸	20 ¹³	4 ³⁸	S 6
M 7	18 59 49	14 ⁵⁹ 20	3 ¹⁹	10 ¹²	2 ⁴²	13 ²⁵	14 ²²	17 ⁷	22 ³⁸	19 ¹¹	28 ⁴²	24 ⁴⁰	25 ⁴⁵	20 ²⁰	4 ⁴²	M 7
T 8	19 3 46	15 ⁵⁶ 31	17 ⁵⁰	10 ⁵³	2 ¹²	14 ⁰	14 ²⁷	17 ¹⁴	22 ³⁹	19 ¹⁰	28 ⁴⁴	24 ³³	25 ⁴²	20 ²⁶	4 ⁴⁶	T 8
W 9	19 7 42	16 ⁵³ 42	2 ¹¹ 21	11 ³¹	1 ⁴⁵	14 ³⁵	14 ³¹	17 ²¹	22 ⁴⁰	19 ¹⁰	28 ⁴⁵	24 ²⁹	25 ³⁸	20 ³³	4 ⁴⁹	W 9
T 10	19 11 39	17 ⁵⁰ 54	16 ⁴⁹	12 ⁴	1 ¹⁹	15 ¹⁰	14 ³⁶	17 ²⁸	22 ⁴¹	19 ⁹	28 ⁴⁷	24 ²⁷	25 ³⁵	20 ⁴⁰	4 ⁵³	T 10
F 11	19 15 35	18 ⁴⁸ 06	1 ¹⁷ 8	12 ³⁴	0 ⁵⁵	15 ⁴⁵	14 ⁴²	17 ³⁵	22 ⁴²	19 ⁸	28 ⁴⁹	24 ²⁷	25 ³²	20 ⁴⁶	4 ⁵⁶	F 11
S 12	19 19 32	19 ⁴⁵ 18	15 ¹⁸	12 ⁵⁹	0 ³⁴	16 ²⁰	14 ⁴⁷	17 ⁴²	22 ⁴³	19 ⁸	28 ⁵⁰	24 ²⁸	25 ²⁹	20 ⁵³	5 ⁰	S 12
S 13	19 23 28	20 ⁴² 31	29 ¹⁶	13 ²⁰	0 ¹⁵	16 ⁵⁵	14 ⁵²	17 ⁴⁹	22 ⁴⁴	19 ⁷	28 ⁵²	24 ²⁸	25 ²⁶	21 ⁰	5 ³	S 13
M14	19 27 25	21 ³⁹ 45	13 ³ 3	13 ³⁶	29 ¹¹ 58	17 ³¹	14 ⁵⁸	17 ⁵⁶	22 ⁴⁴	19 ⁷	28 ⁵³	24 ²⁶	25 ²²	21 ⁶	5 ⁷	M14
T 15	19 31 22	22 ³⁶ 58	26 ³⁸	13 ⁴⁸	29 ⁴³	18 ⁶	15 ⁴	18 ³	22 ⁴⁵	19 ⁶	28 ⁵⁵	24 ²²	25 ¹⁹	21 ¹³	5 ¹⁰	T 15
W16	19 35 18	23 ³⁴ 13	10 ¹¹ 2	13 ⁵⁵	29 ³¹	18 ⁴²	15 ¹⁰	18 ¹⁰	22 ⁴⁶	19 ⁵	28 ⁵⁷	24 ¹⁵	25 ¹⁶	21 ²⁰	5 ¹³	W16
T 17	19 39 15	24 ³¹ 28	23 ¹³	13 ⁵⁸	29 ²¹	19 ¹⁷	15 ¹⁶	18 ¹⁸	22 ⁴⁶	19 ⁴	28 ⁵⁸	24 ⁶	25 ¹³	21 ²⁶	5 ¹⁷	T 17
F 18	19 43 11	25 ²⁸ 43	6 ⁵² 12	13 ⁵⁵	29 ¹⁴	19 ⁵³	15 ²²	18 ²⁵	22 ⁴⁷	19 ⁴	29 ⁰	23 ⁵⁷	25 ¹⁰	21 ³³	5 ²⁰	F 18
S 19	19 47 8	26 ²⁵ 58	18 ⁵⁸	13 ⁴⁸	29 ⁹	20 ²⁸	15 ²⁸	18 ³²	22 ⁴⁷	19 ³	29 ²	23 ⁴⁶	25 ⁷	21 ³⁹	5 ²³	S 19
S 20	19 51 4	27 ²³ 14	1 ¹² 30	13 ³⁶	29 ⁶	21 ⁴	15 ³⁵	18 ⁴⁰	22 ⁴⁸	19 ²	29 ³	23 ³⁷	25 ³	21 ⁴⁶	5 ²⁶	S 20
M21	19 55 1	28 ²⁰ 31	13 ⁴⁹	13 ²⁰	29 ¹¹ 58	21 ⁴⁰	15 ⁴¹	18 ⁴⁷	22 ⁴⁸	19 ¹	29 ⁵	23 ²⁹	25 ⁰	21 ⁵³	5 ²⁹	M21
T 22	19 58 57	29 ¹⁷ 47	25 ⁵⁷	12 ⁵⁸	29 ⁸	22 ¹⁶	15 ⁴⁸	18 ⁵⁴	22 ⁴⁹	19 ⁰	29 ⁶	23 ²³	24 ⁵⁷	21 ⁵⁹	5 ³³	T 22
W23	20 2 54	0 ¹⁵ 04	7 ¹⁷ 44	12 ³³	29 ¹²	22 ⁵²	15 ⁵⁵	19 ²	22 ⁴⁹	18 ⁵⁹	29 ⁸	23 ²⁰	24 ⁵⁴	22 ⁶	5 ³⁶	W23
T 24	20 6 51	1 ¹² 22	19 ⁴⁴	12 ³	29 ¹⁹	23 ²⁸	16 ²	19 ⁹	22 ⁴⁹	18 ⁵⁸	29 ¹⁰	23 ¹⁸	24 ⁵¹	22 ¹³	5 ³⁹	T 24
F 25	20 10 47	2 ⁹ 39	1 ¹² 31	11 ³⁰	29 ²⁷	24 ⁴	16 ⁹	19 ¹⁷	22 ⁴⁹	18 ⁵⁷	29 ¹¹	23 ¹⁹	24 ⁴⁸	22 ¹⁹	5 ⁴¹	F 25
S 26	20 14 44	3 ⁶ 57	13 ¹⁹	10 ⁵⁴	29 ³⁸	24 ⁴⁰	16 ¹⁶	19 ²⁴	22 ⁴⁹	18 ⁵⁶	29 ¹³	23 ²⁰	24 ⁴⁴	22 ²⁶	5 ⁴⁴	S 26
S 27	20 18 40	4 ⁴ 15	25 ¹³	10 ¹⁵	29 ⁵¹	25 ¹⁷	16 ²⁴	19 ³²	22 ⁵⁰	18 ⁵⁵	29 ¹⁵	23 ²¹	24 ⁴¹	22 ³³	5 ⁴⁷	S 27
M28	20 22 37	5 ¹ 34	7 ¹¹ 19	9 ³³	0 ⁵⁸ 6	25 ⁵³	16 ³¹	19 ³⁹	22 ⁵⁰	18 ⁵⁴	29 ¹⁶	23 ²¹	24 ³⁸	22 ³⁹	5 ⁵⁰	M28
T 29	20 26 33	5 ⁵⁸ 53	19 ⁴⁰	8 ⁵¹	0 ²²	26 ³⁰	16 ³⁹	19 ⁴⁷	22 ⁵⁰	18 ⁵³	29 ¹⁸	23 ²⁰	24 ³⁵	22 ⁴⁶	5 ⁵³	T 29
W30	20 30 30	6 ⁵⁶ 12	2 ¹² 23	8 ⁸	0 ⁴¹	27 ⁶	16 ⁴⁶	19 ⁵⁴	22 ⁵⁰	18 ⁵²	29 ¹⁹	23 ¹⁷	24 ³²	22 ⁵³	5 ⁵⁵	W30
T 31	20 34 26	7 ¹² 53'32	15 ¹⁷ 30	7 ¹² 24	1 ⁵⁸ 1	27 ¹⁷ 43	16 ⁵⁴	20 ¹²	22 ⁵¹	18 ⁵¹	29 ²¹	23 ¹³	24 ²⁸	22 ⁵⁹	5 ⁵⁸	T 31

Delta T = 147.72 sec

AUGUST 2183

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 38 23	8♠50'52	29♠ 3	6♠R42	1♠23	28♠19	17♠ 2	20♠ 9	22♠R49	18♠R50	29♠23	23♠R 7	24♠25	23♠ 6	6♠I 1	F 1
S 2	20 42 20	9♠48'13	13♠ 3	6♠ 1	1♠47	28♠56	17♠10	20♠17	22♠Y49	18♠K48	29♠24	23♠ 0	24♠22	23♠12	6♠ 3	S 2
S 3	20 46 16	10♠45'35	27♠27	5♠23	2♠13	29♠33	17♠19	20♠25	22♠49	18♠47	29♠26	22♠53	24♠19	23♠19	6♠ 6	S 3
M 4	20 50 13	11♠42'57	12♠≈ 8	4♠48	2♠40	0♠10	17♠27	20♠32	22♠49	18♠46	29♠28	22♠48	24♠16	23♠26	6♠ 8	M 4
T 5	20 54 9	12♠40'20	27♠ 0	4♠16	3♠ 8	0♠47	17♠35	20♠40	22♠48	18♠45	29♠29	22♠44	24♠13	23♠32	6♠10	T 5
W 6	20 58 6	13♠37'44	11♠55	3♠49	3♠38	1♠24	17♠44	20♠47	22♠48	18♠44	29♠31	22♠42	24♠ 9	23♠39	6♠13	W 6
T 7	21 2 2	14♠35'09	26♠45	3♠28	4♠10	2♠ 1	17♠53	20♠55	22♠47	18♠42	29♠32	22♠D42	24♠ 6	23♠46	6♠15	T 7
F 8	21 5 59	15♠32'36	11♠Y23	3♠11	4♠43	2♠38	18♠ 1	21♠ 3	22♠47	18♠41	29♠34	22♠42	24♠ 3	23♠52	6♠17	F 8
S 9	21 9 55	16♠30'03	25♠45	3♠ 1	5♠17	3♠15	18♠10	21♠10	22♠46	18♠40	29♠35	22♠44	24♠ 0	23♠59	6♠19	S 9
S 10	21 13 52	17♠27'32	9♠849	2♠D56	5♠52	3♠52	18♠19	21♠18	22♠46	18♠38	29♠37	22♠45	23♠57	24♠ 6	6♠22	S 10
M11	21 17 49	18♠25'02	23♠34	2♠59	6♠29	4♠29	18♠28	21♠26	22♠45	18♠37	29♠39	22♠R45	23♠54	24♠12	6♠24	M11
T 12	21 21 45	19♠22'33	7♠II 1	3♠ 8	7♠ 7	5♠ 7	18♠38	21♠33	22♠44	18♠36	29♠40	22♠44	23♠50	24♠19	6♠26	T 12
W13	21 25 42	20♠20'06	20♠11	3♠24	7♠46	5♠44	18♠47	21♠41	22♠44	18♠34	29♠42	22♠41	23♠47	24♠26	6♠28	W13
T 14	21 29 38	21♠17'40	3♠5 5	3♠46	8♠26	6♠22	18♠56	21♠49	22♠43	18♠33	29♠43	22♠37	23♠44	24♠32	6♠29	T 14
F 15	21 33 35	22♠15'16	15♠46	4♠16	9♠ 8	6♠59	19♠ 6	21♠56	22♠42	18♠31	29♠45	22♠32	23♠41	24♠39	6♠31	F 15
S 16	21 37 31	23♠12'53	28♠13	4♠53	9♠50	7♠37	19♠16	22♠ 4	22♠41	18♠30	29♠46	22♠27	23♠38	24♠45	6♠33	S 16
S 17	21 41 28	24♠10'31	10♠ 29	5♠36	10♠33	8♠15	19♠25	22♠12	22♠40	18♠28	29♠48	22♠23	23♠34	24♠52	6♠35	S 17
M18	21 45 24	25♠ 8'10	22♠35	6♠27	11♠17	8♠53	19♠35	22♠20	22♠39	18♠27	29♠49	22♠19	23♠31	24♠59	6♠36	M18
T 19	21 49 21	26♠ 5'51	4♠1733	7♠23	12♠ 2	9♠31	19♠45	22♠27	22♠38	18♠26	29♠51	22♠16	23♠28	25♠ 5	6♠38	T 19
W20	21 53 18	27♠ 3'32	16♠25	8♠27	12♠48	10♠ 8	19♠55	22♠35	22♠37	18♠24	29♠52	22♠15	23♠25	25♠12	6♠40	W20
T 21	21 57 14	28♠ 1'15	28♠12	9♠36	13♠35	10♠46	20♠ 5	22♠43	22♠36	18♠22	29♠54	22♠D15	23♠22	25♠19	6♠41	T 21
F 22	22 1 11	28♠58'59	9♠58	10♠51	14♠22	11♠25	20♠15	22♠50	22♠35	18♠21	29♠55	22♠16	23♠19	25♠25	6♠42	F 22
S 23	22 5 7	29♠56'45	21♠47	12♠12	15♠11	12♠ 3	20♠25	22♠58	22♠34	18♠19	29♠57	22♠18	23♠15	25♠32	6♠44	S 23
S 24	22 9 4	0♠54'31	3♠L41	13♠39	16♠ 0	12♠41	20♠36	23♠ 6	22♠33	18♠18	29♠58	22♠19	23♠12	25♠39	6♠45	S 24
M25	22 13 0	1♠52'19	15♠46	15♠10	16♠50	13♠19	20♠46	23♠13	22♠32	18♠16	29♠59	22♠21	23♠ 9	25♠45	6♠46	M25
T 26	22 16 57	2♠50'08	28♠ 6	16♠45	17♠40	13♠58	20♠57	23♠21	22♠30	18♠15	0♠ 1	22♠R21	23♠ 6	25♠52	6♠47	T 26
W27	22 20 53	3♠47'58	10♠♠46	18♠25	18♠31	14♠36	21♠ 7	23♠28	22♠29	18♠13	0♠ 2	22♠21	23♠ 3	25♠59	6♠48	W27
T 28	22 24 50	4♠45'49	23♠49	20♠ 8	19♠23	15♠14	21♠18	23♠36	22♠28	18♠12	0♠ 4	22♠20	23♠ 0	26♠ 5	6♠50	T 28
F 29	22 28 46	5♠43'42	7♠18	21♠55	20♠16	15♠53	21♠29	23♠44	22♠26	18♠10	0♠ 5	22♠19	22♠56	26♠12	6♠50	F 29
S 30	22 32 43	6♠41'35	21♠15	23♠44	21♠ 9	16♠32	21♠39	23♠51	22♠25	18♠ 8	0♠ 7	22♠17	22♠53	26♠18	6♠51	S 30
S 31	22 36 40	7♠39'30	5≈38	25♠ 36	22≈ 2	17♠10	21♠50	23♠ 59	22♠Y23	18♠K 7	0♠ 8	22♠15	22♠50	26♠25	6♠II.52	S 31

ASTRODIENST EPHEMERIS for the year 2183

geocentric

SEPTEMBER 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 40 36	8 ^h 37'27"	20 ^h 24'	27 ^h 02'	22 ^h 57'	17 ^h 49'	22 ^h 1	24 ^h 6'	22 ^h 22'	18 ^h 5'	0 ^h 9'	22 ^h 13'	22 ^h 47'	26 ^h 32'	6 ^h 53'	M 1
T 2	22 44 33	9 ^h 35'24"	5 ^h 26'	29 ^h 24'	23 ^h 51'	18 ^h 28'	22 ^h 12'	24 ^h 14'	22 ^h 20'	18 ^h 3'	0 ^h 11'	22 ^h 12'	22 ^h 44'	26 ^h 38'	6 ^h 54'	T 2
W 3	22 48 29	10 ^h 33'24"	20 ^h 36'	1 ^h 20'	24 ^h 47'	19 ^h 7'	22 ^h 23'	24 ^h 21'	22 ^h 19'	18 ^h 2'	0 ^h 12'	22 ^h 12'	22 ^h 40'	26 ^h 45'	6 ^h 54'	W 3
T 4	22 52 26	11 ^h 31'24"	5 ^h 44'	3 ^h 17'	25 ^h 43'	19 ^h 46'	22 ^h 35'	24 ^h 29'	22 ^h 17'	18 ^h 0'	0 ^h 13'	22 ^h 12'	22 ^h 37'	26 ^h 52'	6 ^h 55'	T 4
F 5	22 56 22	12 ^h 29'27"	20 ^h 41'	5 ^h 14'	26 ^h 39'	20 ^h 24'	22 ^h 46'	24 ^h 36'	22 ^h 15'	17 ^h 59'	0 ^h 14'	22 ^h 13'	22 ^h 34'	26 ^h 58'	6 ^h 55'	F 5
S 6	23 0 19	13 ^h 27'32"	5 ^h 20'	7 ^h 12'	27 ^h 36'	21 ^h 4'	22 ^h 57'	24 ^h 44'	22 ^h 14'	17 ^h 57'	0 ^h 16'	22 ^h 14'	22 ^h 31'	27 ^h 5'	6 ^h 56'	S 6
S 7	23 4 15	14 ^h 25'38"	19 ^h 37'	9 ^h 9'	28 ^h 33'	21 ^h 43'	23 ^h 9'	24 ^h 51'	22 ^h 12'	17 ^h 55'	0 ^h 17'	22 ^h 14'	22 ^h 28'	27 ^h 12'	6 ^h 56'	S 7
M 8	23 8 12	15 ^h 23'47"	3 ^h 30'	11 ^h 6'	29 ^h 31'	22 ^h 22'	23 ^h 20'	24 ^h 58'	22 ^h 10'	17 ^h 54'	0 ^h 18'	22 ^h 15'	22 ^h 25'	27 ^h 18'	6 ^h 57'	M 8
T 9	23 12 9	16 ^h 21'57"	16 ^h 59'	13 ^h 3'	0 ^h 30'	23 ^h 1'	23 ^h 32'	25 ^h 6'	22 ^h 8'	17 ^h 52'	0 ^h 19'	22 ^h 15'	22 ^h 21'	27 ^h 25'	6 ^h 57'	T 9
W10	23 16 5	17 ^h 20'10"	0 ^h 24'	14 ^h 58'	1 ^h 28'	23 ^h 40'	23 ^h 43'	25 ^h 13'	22 ^h 6'	17 ^h 50'	0 ^h 21'	22 ^h 15'	22 ^h 18'	27 ^h 32'	6 ^h 57'	W10
T 11	23 20 2	18 ^h 18'25"	12 ^h 50'	16 ^h 54'	2 ^h 28'	24 ^h 20'	23 ^h 55'	25 ^h 20'	22 ^h 4'	17 ^h 49'	0 ^h 22'	22 ^h 14'	22 ^h 15'	27 ^h 38'	6 ^h 57'	T 11
F 12	23 23 58	19 ^h 16'41"	25 ^h 18'	18 ^h 48'	3 ^h 27'	24 ^h 59'	24 ^h 6'	25 ^h 28'	22 ^h 3'	17 ^h 47'	0 ^h 23'	22 ^h 14'	22 ^h 12'	27 ^h 45'	6 ^h 57'	F 12
S 13	23 27 55	20 ^h 15'00"	7 ^h 33'	20 ^h 41'	4 ^h 27'	25 ^h 39'	24 ^h 18'	25 ^h 35'	22 ^h 1'	17 ^h 45'	0 ^h 24'	22 ^h 14'	22 ^h 9'	27 ^h 52'	6 ^h 57'	S 13
S 14	23 31 51	21 ^h 13'20"	19 ^h 36'	22 ^h 34'	5 ^h 28'	26 ^h 18'	24 ^h 30'	25 ^h 42'	21 ^h 59'	17 ^h 44'	0 ^h 25'	22 ^h 14'	22 ^h 5'	27 ^h 58'	6 ^h 57'	S 14
M15	23 35 48	22 ^h 11'43"	1 ^h 32'	24 ^h 25'	6 ^h 28'	26 ^h 58'	24 ^h 42'	25 ^h 49'	21 ^h 57'	17 ^h 42'	0 ^h 26'	22 ^h 13'	22 ^h 2'	28 ^h 5'	6 ^h 57'	M15
T 16	23 39 44	23 ^h 10'07"	13 ^h 23'	26 ^h 16'	7 ^h 29'	27 ^h 38'	24 ^h 54'	25 ^h 56'	21 ^h 55'	17 ^h 40'	0 ^h 27'	22 ^h 14'	21 ^h 59'	28 ^h 11'	6 ^h 57'	T 16
W17	23 43 41	24 ^h 8'33"	25 ^h 11'	28 ^h 5'	8 ^h 31'	28 ^h 17'	25 ^h 6'	26 ^h 4'	21 ^h 53'	17 ^h 39'	0 ^h 28'	22 ^h 14'	21 ^h 56'	28 ^h 18'	6 ^h 57'	W17
T 18	23 47 38	25 ^h 7'01"	6 ^h 57'	29 ^h 53'	9 ^h 33'	28 ^h 57'	25 ^h 18'	26 ^h 11'	21 ^h 50'	17 ^h 37'	0 ^h 30'	22 ^h 13'	21 ^h 53'	28 ^h 25'	6 ^h 56'	T 18
F 19	23 51 34	26 ^h 5'31"	18 ^h 46'	1 ^h 41'	10 ^h 35'	29 ^h 37'	25 ^h 30'	26 ^h 18'	21 ^h 48'	17 ^h 36'	0 ^h 31'	22 ^h 13'	21 ^h 50'	28 ^h 31'	6 ^h 56'	F 19
S 20	23 55 31	27 ^h 4'03"	0 ^h 39'	3 ^h 27'	11 ^h 37'	0 ^h 39'	25 ^h 42'	26 ^h 25'	21 ^h 46'	17 ^h 34'	0 ^h 32'	22 ^h 13'	21 ^h 46'	28 ^h 38'	6 ^h 55'	S 20
S 21	23 59 27	28 ^h 2'36"	12 ^h 38'	5 ^h 12'	12 ^h 40'	0 ^h 57'	25 ^h 54'	26 ^h 32'	21 ^h 44'	17 ^h 32'	0 ^h 33'	22 ^h 12'	21 ^h 43'	28 ^h 45'	6 ^h 55'	S 21
M22	0 3 24	29 ^h 1'12"	24 ^h 47'	6 ^h 56'	13 ^h 43'	1 ^h 37'	26 ^h 6'	26 ^h 39'	21 ^h 42'	17 ^h 31'	0 ^h 34'	22 ^h 11'	21 ^h 40'	28 ^h 51'	6 ^h 54'	M22
T 23	0 7 20	29 ^h 59'49"	7 ^h 9'	8 ^h 39'	14 ^h 46'	2 ^h 17'	26 ^h 19'	26 ^h 45'	21 ^h 40'	17 ^h 29'	0 ^h 34'	22 ^h 10'	21 ^h 37'	28 ^h 58'	6 ^h 53'	T 23
W24	0 11 17	0 ^h 58'27"	19 ^h 47'	10 ^h 21'	15 ^h 50'	2 ^h 58'	26 ^h 31'	26 ^h 52'	21 ^h 37'	17 ^h 27'	0 ^h 35'	22 ^h 10'	21 ^h 34'	29 ^h 5'	6 ^h 53'	W24
T 25	0 15 13	1 ^h 57'08"	2 ^h 46'	12 ^h 2'	16 ^h 54'	3 ^h 38'	26 ^h 43'	26 ^h 59'	21 ^h 35'	17 ^h 26'	0 ^h 36'	22 ^h 10'	21 ^h 31'	29 ^h 11'	6 ^h 52'	T 25
F 26	0 19 10	2 ^h 55'50"	16 ^h 7'	13 ^h 42'	17 ^h 58'	4 ^h 18'	26 ^h 56'	27 ^h 6'	21 ^h 33'	17 ^h 24'	0 ^h 37'	22 ^h 10'	21 ^h 27'	29 ^h 18'	6 ^h 51'	F 26
S 27	0 23 6	3 ^h 54'33"	29 ^h 53'	15 ^h 21'	19 ^h 3'	4 ^h 59'	27 ^h 8'	27 ^h 13'	21 ^h 31'	17 ^h 23'	0 ^h 38'	22 ^h 10'	21 ^h 24'	29 ^h 25'	6 ^h 50'	S 27
S 28	0 27 3	4 ^h 53'19"	14 ^h 55'	16 ^h 59'	20 ^h 8'	5 ^h 39'	27 ^h 21'	27 ^h 19'	21 ^h 28'	17 ^h 21'	0 ^h 39'	22 ^h 11'	21 ^h 21'	29 ^h 31'	6 ^h 49'	S 28
M29	0 31 0	5 ^h 52'06"	28 ^h 41'	18 ^h 36'	21 ^h 13'	6 ^h 20'	27 ^h 33'	27 ^h 26'	21 ^h 26'	17 ^h 20'	0 ^h 40'	22 ^h 12'	21 ^h 18'	29 ^h 38'	6 ^h 48'	M29
T 30	0 34 56	6 ^h 50'54"	13 ^h 37'	20 ^h 12'	22 ^h 18'	7 ^h 11'	27 ^h 46'	27 ^h 32'	21 ^h 24'	17 ^h 18'	0 ^h 41'	22 ^h 13'	21 ^h 15'	29 ^h 44'	6 ^h 47'	T 30

Delta T = 147.87 sec

OCTOBER 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 38 53	7♂49'45	28♂46	21♂48	23♂23	7♂41	27♂58	27♂39	21♂21	17♂17	0♂41	22♂13	21♂11	29♂51	6♂46	W 1
T 2	0 42 49	8♂48'37	13♂59	23°22	24°29	8°22	28°11	27°45	21♂19	17♂15	0°42	22♂12	21° 8	29°58	6♂44	T 2
F 3	0 46 46	9♂47'32	29° 6	24°56	25°35	9° 3	28°24	27°52	21°17	17°13	0°43	22°11	21° 5	0♂ 4	6°43	F 3
S 4	0 50 42	10♂46'29	13♂59	26°28	26°41	9°43	28°36	27°58	21°14	17°12	0°44	22° 9	21° 2	0°11	6°42	S 4
S 5	0 54 39	11♂45'27	28♂30	28° 0	27°48	10°24	28°49	28° 4	21°12	17°11	0°44	22° 6	20°59	0°18	6°40	S 5
M 6	0 58 35	12♂44'29	12♂34	29°31	28°55	11° 5	29° 2	28°11	21°10	17° 9	0°45	22° 4	20°56	0°24	6°39	M 6
T 7	1 2 32	13♂43'32	26°10	1♂ 1	0♂ 1	11°46	29°15	28°17	21° 7	17° 8	0°46	22° 2	20°52	0°31	6°37	T 7
W 8	1 6 29	14♂42'38	9♂19	2°30	1° 9	12°28	29°27	28°23	21° 5	17° 6	0°46	22°D 1	20°49	0°38	6°36	W 8
T 9	1 10 25	15♂41'46	22° 4	3°59	2°16	13° 9	29°40	28°29	21° 2	17° 5	0°47	22° 1	20°46	0°44	6°34	T 9
F 10	1 14 22	16♂40'57	4♂28	5°26	3°23	13°50	29°53	28°35	21° 0	17° 3	0°47	22° 2	20°43	0°51	6°32	F 10
S 11	1 18 18	17♂40'10	16°37	6°53	4°31	14°31	0♂ 6	28°41	20°57	17° 2	0°48	22° 3	20°40	0°58	6°31	S 11
S 12	1 22 15	18°39'24	28°34	8°19	5°39	15°13	0°19	28°47	20°55	17° 1	0°48	22° 5	20°36	1° 4	6°29	S 12
M13	1 26 11	19°38'42	10♂24	9°44	6°47	15°54	0°32	28°53	20°53	16°59	0°49	22° 7	20°33	1°11	6°27	M13
T 14	1 30 8	20°38'01	22°11	11° 7	7°56	16°36	0°45	28°58	20°50	16°58	0°49	22°R 7	20°30	1°18	6°25	T 14
W15	1 34 4	21°37'23	3♂57	12°30	9° 4	17°17	0°58	29° 4	20°48	16°57	0°50	22° 6	20°27	1°24	6°23	W15
T 16	1 38 1	22°36'46	15°47	13°52	10°13	17°59	1°11	29°10	20°45	16°55	0°50	22° 4	20°24	1°31	6°21	T 16
F 17	1 41 58	23°36'12	27°42	15°13	11°22	18°41	1°24	29°15	20°43	16°54	0°51	22° 0	20°21	1°37	6°19	F 17
S 18	1 45 54	24°35'40	9♂43	16°33	12°31	19°22	1°37	29°21	20°40	16°53	0°51	21°55	20°17	1°44	6°16	S 18
S 19	1 49 51	25°35'09	21°53	17°52	13°40	20° 4	1°50	29°26	20°38	16°52	0°51	21°49	20°14	1°51	6°14	S 19
M20	1 53 47	26°34'41	4♂13	19° 9	14°49	20°46	2° 3	29°31	20°36	16°51	0°52	21°43	20°11	1°57	6°12	M20
T 21	1 57 44	27°34'15	16°44	20°25	15°59	21°28	2°16	29°37	20°33	16°49	0°52	21°37	20° 8	2° 4	6°10	T 21
W22	2 1 40	28°33'50	29°28	21°40	17° 8	22°10	2°29	29°42	20°31	16°48	0°52	21°32	20° 5	2°11	6° 7	W22
T 23	2 5 37	29°33'27	12♂28	22°53	18°18	22°52	2°42	29°47	20°28	16°47	0°52	21°29	20° 2	2°17	6° 5	T 23
F 24	2 9 33	0♂33'06	25°46	24° 5	19°28	23°34	2°55	29°52	20°26	16°46	0°53	21°D28	19°58	2°24	6° 2	F 24
S 25	2 13 30	1°32'47	9♂22	25°15	20°38	24°16	3° 8	29°57	20°24	16°45	0°53	21°28	19°55	2°31	6° 0	S 25
S 26	2 17 27	2°32'29	23°19	26°22	21°48	24°59	3°21	0♂ 2	20°21	16°44	0°53	21°29	19°52	2°37	5°57	S 26
M27	2 21 23	3°32'12	7♂38	27°28	22°58	25°41	3°34	0° 6	20°19	16°43	0°53	21°31	19°49	2°44	5°55	M27
T 28	2 25 20	4°31'58	22°15	28°31	24° 9	26°23	3°47	0°11	20°16	16°42	0°53	21°R31	19°46	2°51	5°52	T 28
W29	2 29 16	5°31'45	7♂ 8	29°32	25°20	27° 6	4° 0	0°16	20°14	16°41	0°53	21°30	19°42	2°57	5°49	W29
T 30	2 33 13	6°31'34	22° 9	0♂30	26°30	27°48	4°13	0°20	20°12	16°40	0°54	21°27	19°39	3° 4	5°47	T 30
F 31	2 37 9	7♂31'25	7♂10	1♂24	27♂41	28♂31	4♂26	0♂25	20°♂10	16♂39	0♂54	21♂22	19♂36	3♂11	5♂44	F 31

ASTRODIENST EPHEMERIS for the year 2183
geocentric

NOVEMBER 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 6	8♉31°18	22♈3	2♊15	28♏52	29♍14	4♉39	0♏29	20°R 7	16°R38	0°R54	21°R15	19♏33	3♊17	5°R41	S 1
S 2	2 45 2	9°31'13	6♊38	3° 2	0♊ 3	29°56	4°53	0°33	20°Y 5	16°K37	0♊54	21♏ 7	19°30	3°24	5♊38	S 2
M 3	2 48 59	10°31'10	20°49	3°44	1°14	0♊39	5° 6	0°38	20° 3	16°37	0°54	21° 0	19°27	3°30	5°35	M 3
T 4	2 52 55	11°31'09	4♊32	4°22	2°26	1°22	5°19	0°42	20° 1	16°36	0°53	20°53	19°23	3°37	5°32	T 4
W 5	2 56 52	12°31'10	17°47	4°54	3°37	2° 5	5°32	0°46	19°58	16°35	0°53	20°48	19°20	3°44	5°29	W 5
T 6	3 0 49	13°31'13	0♊36	5°20	4°49	2°48	5°45	0°50	19°56	16°34	0°53	20°45	19°17	3°50	5°26	T 6
F 7	3 4 45	14°31'19	13° 2	5°39	6° 1	3°31	5°58	0°54	19°54	16°34	0°53	20°D44	19°14	3°57	5°23	F 7
S 8	3 8 42	15°31'26	25°10	5°51	7°12	4°14	6°11	0°57	19°52	16°33	0°53	20°44	19°11	4° 4	5°20	S 8
S 9	3 12 38	16°31'35	7♏ 6	5°R55	8°24	4°57	6°24	1° 1	19°50	16°32	0°53	20°45	19° 8	4°10	5°17	S 9
M10	3 16 35	17°31'47	18°54	5°51	9°36	5°40	6°37	1° 4	19°48	16°32	0°53	20°R46	19° 4	4°17	5°14	M10
T 11	3 20 31	18°32'00	0♊40	5°37	10°48	6°23	6°50	1° 8	19°46	16°31	0°52	20°45	19° 1	4°24	5°11	T 11
W12	3 24 28	19°32'16	12°29	5°14	12° 0	7° 7	7° 3	1°11	19°44	16°31	0°52	20°43	18°58	4°30	5° 8	W12
T 13	3 28 24	20°32'33	24°23	4°40	13°13	7°50	7°16	1°15	19°42	16°30	0°52	20°37	18°55	4°37	5° 5	T 13
F 14	3 32 21	21°32'52	6♉26	3°57	14°25	8°33	7°29	1°18	19°40	16°30	0°51	20°30	18°52	4°44	5° 1	F 14
S 15	3 36 18	22°33'13	18°39	3° 4	15°38	9°17	7°41	1°21	19°38	16°29	0°51	20°20	18°48	4°50	4°58	S 15
S 16	3 40 14	23°33'36	1♊ 4	2° 2	16°50	10° 0	7°54	1°24	19°36	16°29	0°51	20° 8	18°45	4°57	4°55	S 16
M17	3 44 11	24°34'01	13°41	0°52	18° 3	10°44	8° 7	1°27	19°34	16°28	0°50	19°56	18°42	5° 4	4°52	M17
T 18	3 48 7	25°34'27	26°30	29♉37	19°16	11°28	8°20	1°29	19°32	16°28	0°50	19°44	18°39	5°10	4°48	T 18
W19	3 52 4	26°34'54	9♊31	28°17	20°28	12°11	8°33	1°32	19°30	16°28	0°50	19°34	18°36	5°17	4°45	W19
T 20	3 56 0	27°35'23	22°43	26°56	21°41	12°55	8°45	1°35	19°28	16°27	0°49	19°27	18°33	5°24	4°42	T 20
F 21	3 59 57	28°35'53	6♉ 7	25°37	22°54	13°39	8°58	1°37	19°27	16°27	0°49	19°22	18°29	5°30	4°39	F 21
S 22	4 3 53	29°36'25	19°43	24°21	24° 7	14°23	9°11	1°40	19°25	16°27	0°48	19°20	18°26	5°37	4°35	S 22
S 23	4 7 50	0♊36°57	3♊33	23°11	25°20	15° 7	9°24	1°42	19°23	16°27	0°48	19°D20	18°23	5°43	4°32	S 23
M24	4 11 47	1°37'31	17°36	22°10	26°33	15°51	9°36	1°44	19°22	16°27	0°47	19°R20	18°20	5°50	4°29	M24
T 25	4 15 43	2°38'06	1°Y53	21°19	27°47	16°35	9°49	1°46	19°20	16°26	0°46	19°19	18°17	5°57	4°25	T 25
W26	4 19 40	3°38'42	16°22	20°39	29° 0	17°19	10° 1	1°48	19°19	16°26	0°46	19°17	18°14	6° 3	4°22	W26
T 27	4 23 36	4°39'19	0♊59	20°11	0♉13	18° 3	10°14	1°50	19°17	16°26	0°45	19°12	18°10	6°10	4°19	T 27
F 28	4 27 33	5°39'57	15°39	19°54	1°27	18°47	10°26	1°51	19°16	16°D26	0°45	19° 4	18° 7	6°17	4°15	F 28
S 29	4 31 29	6°40'37	0♉14	19°D48	2°40	19°32	10°39	1°53	19°14	16°26	0°44	18°53	18° 4	6°23	4°12	S 29
S 30	4 35 26	7♊41°18	14♉37	19♉54	3♉54	20♊16	10♉51	1♏55	19°Y13	16°K26	0♊43	18♏41	18♏ 1	6♊30	4♉ 9	S 30

Delta T = 148.02 sec

DECEMBER 2183

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 39 22	8♊42°01	28♉42	20♉ 9	5♉ 7	21♊ 0	11♉ 3	1♏56	19°R11	16°K26	0°R42	18°R29	17♏58	6♊37	4°R 5	M 1
T 2	4 43 19	9°42'45	12♊24	20°34	6°21	21°45	11°16	1°57	19°Y10	16°27	0♊42	18♏18	17°54	6°43	4♉ 2	T 2
W 3	4 47 16	10°43'30	25°40	21° 7	7°34	22°29	11°28	1°58	19° 9	16°27	0°41	18° 9	17°51	6°50	3°59	W 3
T 4	4 51 12	11°44'17	8♊32	21°48	8°48	23°14	11°40	1°59	19° 8	16°27	0°40	18° 3	17°48	6°57	3°55	T 4
F 5	4 55 9	12°45'05	21° 1	22°35	10° 2	23°59	11°52	2° 0	19° 7	16°27	0°39	17°59	17°45	7° 3	3°52	F 5
S 6	4 59 5	13°45'54	3♏11	23°28	11°16	24°43	12° 4	2° 1	19° 5	16°27	0°39	17°57	17°42	7°10	3°49	S 6
S 7	5 3 2	14°46'45	15° 8	24°26	12°30	25°28	12°16	2° 2	19° 4	16°28	0°38	17°57	17°39	7°17	3°46	S 7
M 8	5 6 58	15°47'37	26°57	25°29	13°44	26°13	12°28	2° 3	19° 3	16°28	0°37	17°57	17°35	7°23	3°42	M 8
T 9	5 10 55	16°48'31	8♊45	26°36	14°58	26°58	12°40	2° 3	19° 2	16°28	0°36	17°56	17°32	7°30	3°39	T 9
W10	5 14 51	17°49'25	20°35	27°46	16°12	27°42	12°52	2° 3	19° 1	16°29	0°35	17°53	17°29	7°37	3°36	W10
T 11	5 18 48	18°50'21	2♉33	28°59	17°26	28°27	13° 4	2° 4	19° 0	16°29	0°34	17°47	17°26	7°43	3°33	T 11
F 12	5 22 45	19°51'19	14°43	0♊14	18°40	29°12	13°16	2° 4	19° 0	16°30	0°33	17°38	17°23	7°50	3°29	F 12
S 13	5 26 41	20°52'17	27° 8	1°32	19°54	29°57	13°27	2°R 4	18°59	16°30	0°32	17°26	17°19	7°57	3°26	S 13
S 14	5 30 38	21°53'16	9♊48	2°51	21° 8	0♊43	13°39	2° 4	18°58	16°31	0°31	17°13	17°16	8° 3	3°23	S 14
M15	5 34 34	22°54'17	22°45	4°13	22°23	1°28	13°51	2° 4	18°57	16°31	0°30	16°59	17°13	8°10	3°20	M15
T 16	5 38 31	23°55'18	5♊56	5°35	23°37	2°13	14° 2	2° 3	18°57	16°32	0°29	16°46	17°10	8°16	3°17	T 16
W17	5 42 27	24°56'20	19°20	6°59	24°51	2°58	14°14	2° 3	18°56	16°33	0°28	16°34	17° 7	8°23	3°14	W17
T 18	5 46 24	25°57'22	2♉54	8°24	26° 6	3°43	14°25	2° 3	18°56	16°33	0°27	16°25	17° 4	8°30	3°11	T 18
F 19	5 50 21	26°58'25	16°38	9°50	27°20	4°29	14°36	2° 2	18°55	16°34	0°26	16°19	17° 0	8°36	3° 8	F 19
S 20	5 54 17	27°59'29	0♊27	11°16	28°34	5°14	14°47	2° 1	18°55	16°35	0°25	16°17	16°57	8°43	3° 5	S 20
S 21	5 58 14	29° 0'33	14°23	12°43	29°49	6° 0	14°59	2° 0	18°54	16°36	0°24	16°D16	16°54	8°50	3° 2	S 21
M22	6 2 10	0♊13°37	28°24	14°11	1♊ 3	6°45	15°10	1°59	18°54	16°36	0°23	16°R16	16°51	8°56	2°59	M22
T 23	6 6 7	1° 2'41	12°Y30	15°40	2°18	7°31	15°21	1°58	18°54	16°37	0°22	16°15	16°48	9° 3	2°56	T 23
W24	6 10 3	2° 3'46	26°40	17° 9	3°32	8°16	15°31	1°57	18°53	16°38	0°21	16°13	16°45	9°10	2°54	W24
T 25	6 14 0	3° 4'51	10♊52	18°38	4°47	9° 2	15°42	1°56	18°53	16°39	0°20	16° 9	16°41	9°16	2°51	T 25
F 26	6 17 56	4° 5'56	25° 4	20° 8	6° 1	9°47	15°53	1°55	18°53	16°40	0°18	16° 1	16°38	9°23	2°48	F 26
S 27	6 21 53	5° 7'01	9♉12	21°38	7°16	10°33	16° 4	1°53	18°53	16°41	0°17	15°51	16°35	9°30	2°45	S 27
S 28	6 25 50	6° 8'07	23°10	23° 9	8°31	11°19	16°14	1°51	18°D53	16°42	0°16	15°39	16°32	9°36	2°43	S 28
M29	6 29 46	7° 9'13	6♊55	24°39	9°45	12° 5	16°25	1°50	18°53	16°43	0°15	15°28	16°29	9°43	2°40	M29
T 30	6 33 43	8°10'19	20°22	26°11	11° 0	12°51	16°35	1°48	18°53	16°44	0°14	15°17	16°26	9°50	2°38	T 30
W31	6 37 39	9♊11°26	3♊30	27♊42	12♊15	13♊36	16♉45	1♏46	18°Y53	16°K45	0♊13	15♏ 8	16♏22	9♊56	2♉35	W31

Delta T = 148.09 sec