



# Astrodienst Ephemeris Tables for the year 1974

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 D5EPX

ASTRODIENST EPHEMERIS for the year 1974  
geocentric

JANUARY 1974

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 41 4	10 <sup>3</sup> 11'14	1 <sup>1</sup> 17	5 <sup>3</sup> 17	11 <sup>1</sup> 16	2 <sup>8</sup> 33	14 <sup>1</sup> 25	0°R33	27 <sup>1</sup> 20	8 <sup>1</sup> 20	6 <sup>1</sup> 49	28°R30	27 <sup>1</sup> 55	15 <sup>3</sup> 21	16 <sup>1</sup> 23	T 1
W 2	6 45 0	11°12'24	14° 9	6°52	11°20	2°54	14°38	0 <sup>0</sup> 28	27°22	8°22	6°49	28°D30	27°52	15°28	16°24	W 2
T 3	6 48 57	12°13'33	27°24	8°28	11°R22	3°16	14°51	0°23	27°23	8°24	6°49	28 <sup>1</sup> 31	27°49	15°34	16°24	T 3
F 4	6 52 53	13°14'42	11 <sup>1</sup> 8 4	10° 3	11°22	3°39	15° 4	0°18	27°25	8°26	6°49	28°32	27°46	15°41	16°24	F 4
S 5	6 56 50	14°15'51	25°12	11°40	11°19	4° 2	15°17	0°13	27°26	8°28	6°49	28°33	27°43	15°47	16°25	S 5
S 6	7 0 46	15°16'59	9 <sup>1</sup> II45	13°16	11°13	4°25	15°31	0° 9	27°28	8°30	6°50	28°34	27°40	15°54	16°25	S 6
M 7	7 4 43	16°18'07	24°40	14°53	11° 5	4°48	15°44	0° 4	27°29	8°32	6°50	28°R35	27°36	16° 1	16°26	M 7
T 8	7 8 40	17°19'15	9 <sup>0</sup> 250	16°30	10°54	5°12	15°58	29 <sup>1</sup> II59	27°31	8°34	6°50	28°35	27°33	16° 7	16°26	T 8
W 9	7 12 36	18°20'23	25° 6	18° 8	10°41	5°36	16°11	29°55	27°32	8°36	6°R50	28°33	27°30	16°14	16°27	W 9
T 10	7 16 33	19°21'30	10 <sup>0</sup> 19	19°46	10°25	6° 1	16°25	29°50	27°33	8°37	6°50	28°31	27°27	16°21	16°28	T 10
F 11	7 20 29	20°22'38	25°17	21°24	10° 7	6°26	16°38	29°46	27°34	8°39	6°50	28°28	27°24	16°27	16°28	F 11
S 12	7 24 26	21°23'45	9 <sup>1</sup> II53	23° 3	9°46	6°51	16°52	29°41	27°35	8°41	6°50	28°25	27°21	16°34	16°29	S 12
S 13	7 28 22	22°24'52	24° 2	24°42	9°24	7°16	17° 6	29°37	27°37	8°43	6°49	28°22	27°17	16°41	16°30	S 13
M14	7 32 19	23°25'59	7 <sup>1</sup> II43	26°22	8°59	7°42	17°19	29°33	27°38	8°44	6°49	28°20	27°14	16°47	16°31	M14
T 15	7 36 15	24°27'05	20°57	28° 3	8°32	8° 8	17°33	29°28	27°39	8°46	6°49	28°D19	27°11	16°54	16°32	T 15
W16	7 40 12	25°28'12	3 <sup>1</sup> III45	29°43	8° 3	8°34	17°47	29°24	27°40	8°48	6°49	28°19	27° 8	17° 1	16°33	W16
T 17	7 44 9	26°29'19	16°13	1 <sup>1</sup> II25	7°32	9° 0	18° 1	29°20	27°40	8°50	6°49	28°20	27° 5	17° 7	16°34	T 17
F 18	7 48 5	27°30'25	28°24	3° 6	7° 0	9°27	18°15	29°16	27°41	8°51	6°48	28°22	27° 1	17°14	16°35	F 18
S 19	7 52 2	28°31'31	10 <sup>1</sup> II23	4°48	6°26	9°54	18°29	29°12	27°42	8°53	6°48	28°24	26°58	17°21	16°36	S 19
S 20	7 55 58	29°32'37	22°14	6°31	5°52	10°21	18°43	29° 8	27°43	8°54	6°48	28°25	26°55	17°27	16°38	S 20
M21	7 59 55	0 <sup>0</sup> 33'42	4 <sup>1</sup> II2	8°14	5°16	10°48	18°57	29° 4	27°43	8°56	6°47	28°R25	26°52	17°34	16°39	M21
T 22	8 3 51	1°34'46	15°49	9°57	4°40	11°16	19°11	29° 0	27°44	8°58	6°47	28°24	26°49	17°41	16°40	T 22
W23	8 7 48	2°35'50	27°37	11°40	4° 3	11°44	19°25	28°57	27°45	8°59	6°46	28°20	26°46	17°47	16°42	W23
T 24	8 11 44	3°36'54	9 <sup>1</sup> II29	13°23	3°26	12°12	19°39	28°53	27°45	9° 1	6°46	28°15	26°42	17°54	16°43	T 24
F 25	8 15 41	4°37'56	21°27	15° 6	2°49	12°40	19°53	28°49	27°45	9° 2	6°45	28° 9	26°39	18° 1	16°45	F 25
S 26	8 19 38	5°38'57	3 <sup>1</sup> II32	16°50	2°13	13° 9	20° 7	28°46	27°46	9° 4	6°45	28° 1	26°36	18° 7	16°46	S 26
S 27	8 23 34	6°39'58	15°46	18°33	1°37	13°38	20°21	28°42	27°46	9° 5	6°44	27°54	26°33	18°14	16°48	S 27
M28	8 27 31	7°40'57	28°10	20°15	1° 1	14° 7	20°35	28°39	27°46	9° 6	6°44	27°47	26°30	18°21	16°49	M28
T 29	8 31 27	8°41'56	10 <sup>1</sup> II46	21°57	0°27	14°36	20°50	28°36	27°47	9° 8	6°43	27°42	26°27	18°27	16°51	T 29
W30	8 35 24	9°42'53	23°38	23°38	29 <sup>1</sup> II54	15° 5	21° 4	28°33	27°47	9° 9	6°42	27°39	26°23	18°34	16°53	W30
T 31	8 39 20	10 <sup>1</sup> II43'49	6 <sup>1</sup> II47	25 <sup>1</sup> II17	29 <sup>1</sup> II23	15 <sup>1</sup> II35	21 <sup>1</sup> II18	28 <sup>1</sup> II30	27 <sup>1</sup> II47	9 <sup>1</sup> II10	6 <sup>1</sup> II41	27°D38	26 <sup>1</sup> II20	18 <sup>1</sup> II40	16 <sup>1</sup> II55	T 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	23s 3	5n21	5n17	24s42	1s22	16s10	1n17	13n26	1n 8	17s13	0s44	22n24	1s 2	9s59	0n35	20s10	1n33	12n33	16n38	23s26	23s26	21s 1	7n32	1n11	
W 2	22 58	10 16	5 6	24 42	1 27	15 56	1 30	13 34	1 9	17 9	0 44	22 24	1 2	10 0	0 35	20 10	1 33	12 33	16 38	23 26	23 26	21 0	7 32	1 10	
T 3	22 53	14 52	4 38	24 42	1 31	15 42	1 44	13 42	1 10	17 5	0 44	22 24	1 2	10 0	0 35	20 11	1 33	12 34	16 39	23 26	23 25	20 58	7 32	1 10	
F 4	22 47	18 51	3 54	24 39	1 36	15 29	1 58	13 51	1 11	17 1	0 44	22 25	1 2	10 1	0 35	20 11	1 33	12 34	16 39	23 26	23 25	20 57	7 32	1 10	
S 5	22 41	21 53	2 55	24 35	1 40	15 15	2 13	14 0	1 12	16 57	0 44	22 25	1 2	10 1	0 35	20 11	1 33	12 35	16 40	23 26	23 25	20 55	7 32	1 10	
S 6	22 34	23 36	1 42	24 30	1 44	15 3	2 28	14 8	1 13	16 53	0 44	22 25	1 2	10 2	0 35	20 11	1 33	12 35	16 40	23 26	23 25	20 53	7 32	1 10	
M 7	22 27	23 42	0 22	24 24	1 48	14 51	2 43	14 17	1 14	16 49	0 44	22 25	1 2	10 2	0 35	20 12	1 33	12 36	16 41	23 26	23 25	20 52	7 32	1 10	
T 8	22 19	22 3	1s 2	24 15	1 51	14 39	2 58	14 26	1 15	16 45	0 44	22 25	1 1	10 3	0 35	20 12	1 33	12 36	16 42	23 26	23 25	20 50	7 32	1 10	
W 9	22 11	18 48	2 22	24 6	1 54	14 28	3 13	14 35	1 16	16 41	0 44	22 25	1 1	10 3	0 35	20 12	1 33	12 37	16 42	23 26	23 25	20 49	7 32	1 10	
T 10	22 3	14 17	3 31	23 55	1 57	14 17	3 28	14 44	1 17	16 37	0 44	22 25	1 1	10 4	0 35	20 12	1 33	12 37	16 43	23 26	23 25	20 47	7 32	1 9	
F 11	21 54	8 57	4 24	23 42	1 59	14 7	3 44	14 53	1 17	16 33	0 44	22 25	1 1	10 4	0 35	20 13	1 33	12 38	16 43	23 26	23 25	20 45	7 33	1 9	
S 12	21 44	3 15	4 59	23 28	2 1	13 58	3 59	15 2	1 18	16 29	0 44	22 26	1 1	10 4	0 35	20 13	1 33	12 38	16 44	23 26	23 25	20 44	7 33	1 9	
S 13	21 35	2s27	5 14	23 12	2 3	13 49	4 14	15 11	1 19	16 25	0 44	22 26	1 1	10 5	0 35	20 13	1 33	12 39	16 44	23 26	23 25	20 42	7 33	1 9	
M14	21 25	7 49	5 11	22 55	2 4	13 40	4 30	15 20	1 20	16 21	0 44	22 26	1 1	10 5	0 35	20 13	1 33	12 40	16 45	23 26	23 25	20 40	7 33	1 9	
T 15	21 14	12 40	4 51	22 36	2 5	13 33	4 45	15 29	1 20	16 17	0 44	22 26	1 0	10 5	0 35	20 14	1 34	12 40	16 46	23 26	23 25	20 39	7 33	1 9	
W16	21 3	16 48	4 17	22 16	2 6	13 26	5 0	15 38	1 21	16 13	0 44	22 26	1 0	10 6	0 35	20 14	1 34	12 41	16 46	23 26	23 25	20 37	7 34	1 9	
T 17	20 52	20 4	3 32	21 54	2 6	13 19	5 14	15 47	1 22	16 8	0 44	22 26	1 0	10 6	0 35	20 14	1 34	12 41	16 47	23 26	23 25	20 36	7 34	1 8	
F 18	20 40	22 22	2 38	21 30	2 6	13 14	5 28	15 56	1 22	16 4	0 44	22 26	1 0	10 6	0 35	20 14	1 34	12 42	16 47	23 26	23 25	20 34	7 34	1 8	
S 19	20 28	23 37	1 38	21 5	2 5	13 9	5 42	16 6	1 23	16 0	0 44	22 27	1 0	10 7	0 35	20 14	1 34	12 43	16 48	23 26	23 24	20 32	7 35	1 8	
S 20	20 15	23 47	0 34	20 39	2 4	13 4	5 55	16 15	1 23	15 56	0 45	22 27	1 0	10 7	0 35	20 15	1 34	12 43	16 48	23 26	23 24	20 31	7 35	1 8	
M21	20 2	22 52	0n31	20 11	2 2	13 0	6 8	16 24	1 24	15 51	0 45	22 27	0 59	10 7	0 35	20 15	1 34	12 44	16 49	23 26	23 24	20 29	7 35	1 8	
T 22	19 49	20 57	1 34	19 41	2 0	12 57	6 19	16 33	1 25	15 47	0 45	22 27	0 59	10 7	0 35	20 15	1 34	12 45	16 49	23 26	23 24	20 27	7 36	1 8	
W23	19 35	18 8	2 33	19 10	1 57	12 55	6 31	16 42	1 25	15 42	0 45	22 27	0 59	10 7	0 35	20 15	1 34	12 45	16 50	23 26	23 24	20 26	7 36	1 8	
T 24	19 21	14 35	3 26	18 37	1 54	12 53	6 41	16 51	1 26	15 38	0 45	22 27	0 59	10 7	0 35	20 15	1 34	12 46	16 51	23 26	23 24	20 24	7 37	1 8	
F 25	19 6	10 25	4 9	18 3	1 50	12 52	6 51	17 1	1 26	15 34	0 45	22 27	0 59	10 8	0 35	20 16	1 34	12 47	16 51	23 26	23 24	20 22	7 37	1 7	
S 26	18 52	5 49	4 43	17 28	1 45	12 51	7 0	17 10	1 27	15 29	0 45	22 28	0 59	10 8	0 35	20 16	1 34	12 47	16 52	23 26	23 24	20 20	7 38	1 7	
S 27	18 37	0 57	5 3	16 51	1 40	12 51	7 8	17 19	1 27	15 25	0 45	22 28	0 58	10 8	0 35	20 16	1 34	12 48	16 52	23 26	23 24	20 19	7 38	1 7	
M28	18 21	4n 1	5 10	16 13	1 34	12 51	7 15	17 28	1 27	15 20	0 45	22 28	0 58	10 8	0 35	20 16	1 34	12 49	16 53	23 25	23 24	20 17	7 39	1 7	
T 29	18 5	8 54	5 2	15 34	1 27	12 52	7 21	17 37	1 28	15 16	0 45	22 28	0 58	10 8	0 35	20 16	1 34	12 50	16 53	23 25	23 24	20 15	7 39	1 7	
W30	17 49	13 30	4 39	14 54	1 19	12 53	7 27	17 46	1 28	15 11	0 45	22 28	0 58	10 8	0 35	20 17	1 34	12 50	16 54	23 25	23 24	20 14	7 40	1 7	
T 31	17s33	17n34	4n 1	14s13	1s11	12s55	7n31	17n55	1n29	15s 7	0s45	22n28	0s58	10s 8	0n36	20s17	1n34	12n51	16n54	23s25	23s24	20s12	7n40	1n	

ASTRODIENST EPHEMERIS for the year 1974  
geocentric

FEBRUARY 1974

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 43 17	11 <sup>44</sup> 44'3	20 <sup>8</sup> 17	26 <sup>55</sup> 55	28°R53	16 <sup>8</sup> 4	21 <sup>32</sup> 32	28°R27	27°R47	9 <sup>12</sup> 12	6°R41	27 <sup>38</sup> 38	26 <sup>17</sup> 17	18 <sup>34</sup> 47	16 <sup>56</sup> 56	F 1
S 2	8 47 13	12°45'37	4 <sup>II</sup> 9	28°31	28 <sup>35</sup> 25	16°34	21°47	28 <sup>II</sup> 24	27 <sup>47</sup> 47	9°13	6 <sup>40</sup> 40	27°39	26°14	18°54	16°58	S 2
S 3	8 51 10	13°46'29	18°24	0 <sup>H</sup> 5	27°59	17° 4	22° 1	28°21	27°47	9°14	6°39	27°40	26°11	19° 0	17° 0	S 3
M 4	8 55 7	14°47'19	3 <sup>III</sup> 1	1°36	27°36	17°35	22°15	28°19	27°47	9°15	6°38	27°R40	26° 7	19° 7	17° 2	M 4
T 5	8 59 3	15°48'09	17°56	3° 3	27°14	18° 5	22°30	28°16	27°46	9°17	6°37	27°39	26° 4	19°14	17° 4	T 5
W 6	9 3 0	16°48'57	3 <sup>II</sup> 2	4°26	26°55	18°35	22°44	28°14	27°46	9°18	6°37	27°35	26° 1	19°20	17° 6	W 6
T 7	9 6 56	17°49'43	18°11	5°44	26°38	19° 6	22°58	28°11	27°46	9°19	6°36	27°29	25°58	19°27	17° 8	T 7
F 8	9 10 53	18°50'29	3 <sup>III</sup> 12	6°56	26°23	19°37	23°13	28° 9	27°46	9°20	6°35	27°21	25°55	19°34	17°11	F 8
S 9	9 14 49	19°51'13	17°56	8° 2	26°11	20° 8	23°27	28° 7	27°45	9°21	6°34	27°12	25°52	19°40	17°13	S 9
S 10	9 18 46	20°51'56	2 <sup>II</sup> 16	9° 1	26° 2	20°39	23°41	28° 5	27°45	9°22	6°33	27° 4	25°48	19°47	17°15	S 10
M 11	9 22 42	21°52'37	16° 7	9°53	25°55	21°10	23°56	28° 3	27°44	9°23	6°32	26°57	25°45	19°54	17°17	M 11
T 12	9 26 39	22°53'18	29°28	10°35	25°50	21°41	24°10	28° 1	27°44	9°24	6°31	26°52	25°42	20° 0	17°20	T 12
W 13	9 30 36	23°53'58	12 <sup>III</sup> 23	11° 9	25°D48	22°13	24°25	28° 0	27°43	9°25	6°29	26°49	25°39	20° 7	17°22	W 13
T 14	9 34 32	24°54'37	24°53	11°33	25°49	22°45	24°39	27°58	27°42	9°26	6°28	26°D48	25°36	20°14	17°24	T 14
F 15	9 38 29	25°55'14	7 <sup>II</sup> 4	11°47	25°52	23°16	24°53	27°56	27°42	9°27	6°27	26°49	25°33	20°20	17°27	F 15
S 16	9 42 25	26°55'51	19° 2	11°R50	25°57	23°48	25° 8	27°55	27°41	9°27	6°26	26°50	25°29	20°27	17°29	S 16
S 17	9 46 22	27°56'26	0 <sup>III</sup> 51	11°43	26° 4	24°20	25°22	27°54	27°40	9°28	6°25	26°R50	25°26	20°34	17°32	S 17
M 18	9 50 18	28°57'00	12°37	11°26	26°14	24°52	25°37	27°53	27°39	9°29	6°24	26°48	25°23	20°40	17°34	M 18
T 19	9 54 15	29°57'32	24°24	10°58	26°26	25°24	25°51	27°51	27°38	9°30	6°22	26°45	25°20	20°47	17°37	T 19
W 20	9 58 11	0 <sup>H</sup> 58'03	6 <sup>III</sup> 16	10°22	26°40	25°57	26° 5	27°51	27°37	9°30	6°21	26°38	25°17	20°54	17°40	W 20
T 21	10 2 8	1°58'33	18°15	9°37	26°57	26°29	26°20	27°50	27°36	9°31	6°20	26°29	25°13	21° 0	17°42	T 21
F 22	10 6 5	2°59'01	0 <sup>H</sup> 23	8°45	27°15	27° 2	26°34	27°49	27°35	9°32	6°19	26°17	25°10	21° 7	17°45	F 22
S 23	10 10 1	3°59'27	12°41	7°48	27°35	27°34	26°48	27°48	27°34	9°32	6°17	26° 4	25° 7	21°14	17°48	S 23
S 24	10 13 58	4°59'52	25°10	6°46	27°57	28° 7	27° 3	27°48	27°33	9°33	6°16	25°52	25° 4	21°20	17°51	S 24
M 25	10 17 54	6° 0'14	7°Y50	5°42	28°21	28°40	27°17	27°47	27°31	9°33	6°15	25°40	25° 1	21°27	17°53	M 25
T 26	10 21 51	7° 0'36	4°37	28°46	29°13	29°13	27°31	27°47	27°30	9°34	6°13	25°30	24°58	21°34	17°56	T 26
W 27	10 25 47	8° 0'55	3 <sup>III</sup> 43	3°32	29°13	29°46	27°46	27°47	27°29	9°34	6°12	25°22	24°54	21°40	17°59	W 27
T 28	10 29 44	9 <sup>H</sup> 1'12	16 <sup>III</sup> 59	2 <sup>H</sup> 30	29°342	0 <sup>II</sup> 19	28 <sup>III</sup> 0	27°D47	27 <sup>II</sup> 27	9 <sup>II</sup> 35	6 <sup>II</sup> 10	25 <sup>II</sup> 18	24 <sup>II</sup> 51	21 <sup>II</sup> 47	18 <sup>II</sup> Y 2	T 28

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	17s16	20n51	3n 9	13s31	1s 2	12s57	7n35	18n 4	1n29	15s 2	0s45	22n28	0s58	10s 8	0n36	20s17	1n34	12n52	16n55	23s25	23s23	20s10	7n41	1n 7			
S 2	16 59	23 0	2 4	12 49	0 53	13 0	7 38	18 13	1 29	14 58	0 45	22 29	0 57	10 8	0 36	20 17	1 34	12 53	16 55	23 25	23 23	20 9	7 41	1 6			
S 3	16 42	23 46	0 50	12 6	0 42	13 3	7 40	18 22	1 30	14 53	0 45	22 29	0 57	10 8	0 36	20 17	1 34	12 53	16 56	23 25	23 23	20 7	7 42	1 6			
M 4	16 24	22 56	0s29	11 23	0 31	13 6	7 41	18 31	1 30	14 48	0 45	22 29	0 57	10 8	0 36	20 17	1 34	12 54	16 56	23 25	23 23	20 5	7 43	1 6			
T 5	16 6	20 28	1 47	10 41	0 19	13 10	7 41	18 40	1 30	14 44	0 45	22 29	0 57	10 8	0 36	20 17	1 34	12 55	16 57	23 25	23 23	20 3	7 43	1 6			
W 6	15 48	16 35	2 59	9 59	0 6	13 14	7 41	18 49	1 31	14 39	0 45	22 29	0 57	10 8	0 36	20 18	1 34	12 56	16 57	23 25	23 23	20 2	7 44	1 6			
T 7	15 29	11 36	3 58	9 17	0n 8	13 18	7 40	18 58	1 31	14 35	0 45	22 29	0 57	10 7	0 36	20 18	1 34	12 56	16 58	23 25	23 23	20 0	7 45	1 6			
F 8	15 11	5 59	4 40	8 37	0 22	13 22	7 38	19 6	1 31	14 30	0 45	22 29	0 56	10 7	0 36	20 18	1 34	12 57	16 58	23 25	23 23	19 58	7 45	1 6			
S 9	14 52	0 8	5 3	7 59	0 37	13 27	7 36	19 15	1 32	14 25	0 46	22 30	0 56	10 7	0 36	20 18	1 35	12 58	16 59	23 25	23 23	19 56	7 46	1 6			
S 10	14 33	5s34	5 5	7 23	0 52	13 31	7 33	19 24	1 32	14 21	0 46	22 30	0 56	10 7	0 36	20 18	1 35	12 59	16 59	23 25	23 23	19 55	7 47	1 5			
M 11	14 13	10 48	4 50	6 49	1 8	13 36	7 30	19 32	1 32	14 16	0 46	22 30	0 56	10 7	0 36	20 18	1 35	13 0	16 59	23 24	23 22	19 53	7 48	1 5			
T 12	13 53	15 19	4 19	6 18	1 24	13 40	7 26	19 41	1 32	14 11	0 46	22 30	0 56	10 7	0 36	20 18	1 35	13 0	17 0	23 24	23 22	19 51	7 49	1 5			
W 13	13 33	18 58	3 35	5 50	1 41	13 45	7 21	19 49	1 33	14 6	0 46	22 30	0 55	10 6	0 36	20 18	1 35	13 1	17 0	23 24	23 22	19 49	7 49	1 5			
T 14	13 13	21 37	2 43	5 26	1 57	13 50	7 17	19 57	1 33	14 2	0 46	22 30	0 55	10 6	0 36	20 18	1 35	13 2	17 1	23 24	23 22	19 48	7 50	1 5			
F 15	12 53	23 12	1 44	5 6	2 13	13 54	7 11	20 6	1 33	13 57	0 46	22 31	0 55	10 6	0 36	20 18	1 35	13 3	17 1	23 24	23 22	19 46	7 51	1 5			
S 16	12 32	23 41	0 42	4 51	2 28	13 59	7 6	20 14	1 33	13 52	0 46	22 31	0 55	10 5	0 36	20 19	1 35	13 4	17 2	23 24	23 22	19 44	7 52	1 5			
S 17	12 11	23 5	0n22	4 40	2 43	14 3	7 0	20 22	1 33	13 47	0 46	22 31	0 55	10 5	0 36	20 19	1 35	13 5	17 2	23 24	23 22	19 42	7 53	1 5			
M 18	11 50	21 27	1 23	4 34	2 56	14 8	6 54	20 30	1 34	13 43	0 46	22 31	0 54	10 5	0 36	20 19	1 35	13 5	17 2	23 24	23 22	19 40	7 54	1 5			
T 19	11 29	18 55	2 22	4 33	3 8	14 12	6 47	20 38	1 34	13 38	0 46	22 31	0 54	10 4	0 36	20 19	1 35	13 6	17 3	23 24	23 22	19 39	7 54	1 4			
W 20	11 8	15 34	3 14	4 36	3 19	14 16	6 41	20 46	1 34	13 33	0 46	22 31	0 54	10 4	0 36	20 19	1 35	13 7	17 3	23 24	23 21	19 37	7 55	1 4			
T 21	10 46	11 35	3 58	4 45	3 28	14 20	6 34	20 54	1 34	13 28	0 46	22 32	0 54	10 4	0 36	20 19	1 35	13 8	17 3	23 24	23 21	19 35	7 56	1 4			
F 22	10 25	7 5	4 32	4 57	3 35	14 23	6 27	21 2	1 34	13 23	0 46	22 32	0 54	10 3	0 36	20 19	1 35	13 9	17 4	23 23	23 21	19 33	7 57	1 4			
S 23	10 3	2 16	4 54	5 14	3 40	14 27	6 19	21 9	1 34	13 19	0 47	22 32	0 53	10 3	0 36	20 19	1 35	13 10	17 4	23 23	23 21	19 32	7 58	1 4			
S 24	9 41	2n42	5 2	5 34	3 43	14 30	6 12	21 17	1 35	13 14	0 47	22 32	0 53	10 2	0 36	20 19	1 35	13 10	17 4	23 23	23 21	19 30	7 59	1 4			
M 25	9 19	7 37	4 55	5 57	3 43	14 33	6 4	21 24	1 35	13 9	0 47	22 32	0 53	10 2	0 36	20 19	1 35	13 11	17 5	23 22	23 21	19 28	8 0	1 4			
T 26	8 56	12 18	4 34	6 23	3 42	14 35	5 57	21 32	1 35	13 4	0 47	22 33	0 53	10 1	0 36	20 19	1 35	13 12	17 5	23 22	23 21	19 26	8 1	1 4			
W 27	8 34	16 29	3 58	6 50	3 38	14 38	5 49	21 39	1 35	12 59	0 47	22 33	0 53	10 1	0 36	20 19	1 35	13 13	17 5	23 22	23 21	19 24	8 2	1 4			
T 28	8s11	19n55	3n 8	7s17	3n32	14s40	5n41	21n46	1n35	12s54	0s47	22n33	0s53	10s 0	0n36	20s19	1n35	13n14	17n 6	23s22	23s21	19s22	8n 3	1n 3			

Julian Day Number = 2442079.5, Delta T = 44.57 sec  
Ecliptic obliquity = 23°26'33", Nutation = 0°00'18", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 24°22'42", Lahiri = 23°29'42"

ASTRODIENST EPHEMERIS for the year 1974  
geocentric

MARCH 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 33 40	10°12'27"	0°11'28"	1°R31	0°12'12"	0°11'52"	28°14'14"	27°11'47"	27°R26	9°12'35"	6°R 9	25°R16	24°12'48"	21°12'54"	18°12'05"	F 1
S 2	10 37 37	11° 1'40"	14°13'13"	0°12'37"	0°12'44"	1°26'	28°28'	27°47'	27°12'25"	9°35'	6°12'7"	25°D16	24°45'	22° 0'	18° 8'	S 2
S 3	10 41 33	12° 1'52"	28°14'	29°12'48"	1°17'	1°59'	28°43'	27°48'	27°23'	9°36'	6° 6'	25°R16	24°42'	22° 7'	18°11'	S 3
M 4	10 45 30	13° 2'01"	12°28'31"	29° 5'	1°52'	2°32'	28°57'	27°48'	27°21'	9°36'	6° 5'	25°12'15"	24°39'	22°14'	18°14'	M 4
T 5	10 49 27	14° 2'08"	27° 4'	28°29'	2°28'	3° 6'	29°11'	27°48'	27°20'	9°36'	6° 3'	25°12'	24°35'	22°20'	18°17'	T 5
W 6	10 53 23	15° 2'12"	11°12'47"	27°59'	3° 5'	3°40'	29°25'	27°49'	27°18'	9°36'	6° 2'	25° 6'	24°32'	22°27'	18°20'	W 6
T 7	10 57 20	16° 2'15"	26°35'	27°36'	3°44'	4°13'	29°39'	27°50'	27°17'	9°37'	6° 0'	24°58'	24°29'	22°34'	18°23'	T 7
F 8	11 1 16	17° 2'16"	11°12'20"	27°20'	4°23'	4°47'	29°53'	27°51'	27°15'	9°37'	5°58'	24°47'	24°26'	22°40'	18°26'	F 8
S 9	11 5 13	18° 2'14"	25°53'	27°11'	5° 4'	5°21'	0°12'8"	27°52'	27°13'	9°37'	5°57'	24°35'	24°23'	22°47'	18°29'	S 9
S 10	11 9 9	19° 2'11"	10°12'8"	27°D 8	5°46'	5°55'	0°22'	27°53'	27°11'	9°37'	5°55'	24°23'	24°19'	22°54'	18°33'	S 10
M 11	11 13 6	20° 2'06"	23°59'	27°12'	6°29'	6°29'	0°36'	27°54'	27° 9'	9°37'	5°54'	24°13'	24°16'	23° 0'	18°36'	M 11
T 12	11 17 2	21° 2'00"	7°12'24"	27°21'	7°13'	7° 3'	0°50'	27°55'	27° 7'	9°R37	5°52'	24° 5'	24°13'	23° 7'	18°39'	T 12
W 13	11 20 59	22° 1'52"	20°22'	27°37'	7°57'	7°37'	1° 3'	27°57'	27° 6'	9°37'	5°51'	23°59'	24°10'	23°14'	18°42'	W 13
T 14	11 24 56	23° 1'42"	2°12'56"	27°57'	8°43'	8°11'	1°17'	27°58'	27° 4'	9°37'	5°49'	23°56'	24° 7'	23°20'	18°45'	T 14
F 15	11 28 52	24° 1'30"	15°11'	28°23'	9°30'	8°45'	1°31'	28° 0'	27° 2'	9°37'	5°47'	23°55'	24° 4'	23°27'	18°49'	F 15
S 16	11 32 49	25° 1'17"	27°11'	28°53'	10°18'	9°19'	1°45'	28° 2'	27° 0'	9°37'	5°46'	23°55'	24° 0'	23°34'	18°52'	S 16
S 17	11 36 45	26° 1'02"	9°12'2"	29°28'	11° 6'	9°54'	1°59'	28° 3'	26°58'	9°37'	5°44'	23°55'	23°57'	23°40'	18°55'	S 17
M 18	11 40 42	27° 0'45"	20°50'	0°12'6"	11°55'	10°28'	2°13'	28° 5'	26°55'	9°36'	5°42'	23°53'	23°54'	23°47'	18°59'	M 18
T 19	11 44 38	28° 0'26"	2°12'39"	0°49'	12°45'	11° 3'	2°26'	28° 7'	26°53'	9°36'	5°41'	23°49'	23°51'	23°54'	19° 2'	T 19
W 20	11 48 35	29° 0'06"	14°34'	1°36'	13°36'	11°37'	2°40'	28°10'	26°51'	9°36'	5°39'	23°42'	23°48'	24° 0'	19° 5'	W 20
T 21	11 52 31	29°59'44"	26°40'	2°25'	14°27'	12°12'	2°54'	28°12'	26°49'	9°36'	5°38'	23°33'	23°44'	24° 7'	19° 9'	T 21
F 22	11 56 28	0°12'59'19"	8°12'58"	3°18'	15°19'	12°46'	3° 7'	28°14'	26°47'	9°35'	5°36'	23°21'	23°41'	24°13'	19°12'	F 22
S 23	12 0 25	1°58'53"	21°29'	4°14'	16°12'	13°21'	3°21'	28°17'	26°45'	9°35'	5°34'	23° 8'	23°38'	24°20'	19°16'	S 23
S 24	12 4 21	2°58'25"	4°12'16"	5°13'	17° 5'	13°56'	3°34'	28°19'	26°42'	9°35'	5°33'	22°54'	23°35'	24°27'	19°19'	S 24
M 25	12 8 18	3°57'55"	17°16'	6°15'	17°59'	14°30'	3°48'	28°22'	26°40'	9°34'	5°31'	22°42'	23°32'	24°33'	19°23'	M 25
T 26	12 12 14	4°57'23"	0°12'28"	7°19'	18°54'	15° 5'	4° 1'	28°25'	26°38'	9°34'	5°29'	22°31'	23°29'	24°40'	19°26'	T 26
W 27	12 16 11	5°56'49"	13°52'	8°26'	19°49'	15°40'	4°14'	28°28'	26°35'	9°33'	5°28'	22°23'	23°25'	24°47'	19°29'	W 27
T 28	12 20 7	6°56'12"	27°25'	9°35'	20°44'	16°15'	4°28'	28°31'	26°33'	9°33'	5°26'	22°19'	23°22'	24°53'	19°33'	T 28
F 29	12 24 4	7°55'34"	11°12'7"	10°46'	21°40'	16°50'	4°41'	28°34'	26°31'	9°32'	5°24'	22°16'	23°19'	25° 0'	19°36'	F 29
S 30	12 28 0	8°54'53"	24°58'	11°59'	22°37'	17°25'	4°54'	28°37'	26°28'	9°32'	5°23'	22°D16	23°16'	25° 7'	19°40'	S 30
S 31	12 31 57	9°12'54'09"	8°12'57"	13°12'14"	23°12'34"	18°12'0"	5°12'7"	28°12'40"	26°12'26"	9°12'31"	5°12'21"	22°R16	23°12'13"	25°12'13"	19°12'43"	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	7s49	22n20	2n 7	7s45	3n24	14s41	5n33	21n53	1n35	12s49	0s47	22n33	0s52	10s 0	0n36	20s19	1n35	13n15	17n 6	23s21	23s20	19s21	8n 4	1n 3			
S 2	7 26	23 28	0 58	8 13	3 15	14 42	5 25	22 0	1 35	12 45	0 47	22 33	0 52	9 59	0 36	20 19	1 36	13 15	17 6	23 21	23 20	19 19	8 5	1 3			
S 3	7 3	23 10	0s16	8 40	3 4	14 43	5 17	22 7	1 35	12 40	0 47	22 33	0 52	9 59	0 36	20 19	1 36	13 16	17 7	23 21	23 20	19 17	8 6	1 3			
M 4	6 40	21 21	1 30	9 6	2 52	14 44	5 9	22 14	1 35	12 35	0 47	22 34	0 52	9 58	0 36	20 19	1 36	13 17	17 7	23 21	23 20	19 15	8 7	1 3			
T 5	6 17	18 8	2 40	9 31	2 40	14 44	5 1	22 20	1 35	12 30	0 47	22 34	0 52	9 58	0 36	20 19	1 36	13 18	17 7	23 21	23 20	19 13	8 8	1 3			
W 6	5 54	13 44	3 40	9 53	2 26	14 44	4 52	22 27	1 35	12 25	0 48	22 34	0 51	9 57	0 36	20 19	1 36	13 19	17 7	23 21	23 20	19 11	8 9	1 3			
T 7	5 31	8 30	4 25	10 14	2 12	14 43	4 44	22 33	1 35	12 20	0 48	22 34	0 51	9 56	0 36	20 19	1 36	13 19	17 8	23 21	23 20	19 10	8 11	1 3			
F 8	5 7	2 48	4 52	10 33	1 58	14 42	4 36	22 39	1 35	12 15	0 48	22 35	0 51	9 56	0 36	20 19	1 36	13 20	17 8	23 20	23 20	19 8	8 12	1 3			
S 9	4 44	2s58	5 0	10 49	1 44	14 40	4 28	22 46	1 35	12 11	0 48	22 35	0 51	9 55	0 36	20 19	1 36	13 21	17 8	23 20	23 19	19 6	8 13	1 3			
S 10	4 20	8 27	4 49	11 3	1 30	14 38	4 20	22 52	1 35	12 6	0 48	22 35	0 51	9 54	0 36	20 19	1 36	13 22	17 8	23 19	23 19	19 4	8 14	1 2			
M 11	3 57	13 21	4 22	11 15	1 16	14 36	4 12	22 58	1 35	12 1	0 48	22 35	0 50	9 54	0 36	20 19	1 36	13 23	17 9	23 19	23 19	19 2	8 15	1 2			
T 12	3 33	17 26	3 40	11 25	1 2	14 33	4 4	23 3	1 35	11 56	0 48	22 35	0 50	9 53	0 36	20 19	1 36	13 23	17 9	23 19	23 19	19 0	8 16	1 2			
W 13	3 10	20 32	2 48	11 33	0 48	14 29	3 55	23 9	1 35	11 51	0 48	22 36	0 50	9 52	0 36	20 19	1 36	13 24	17 9	23 18	23 19	18 58	8 17	1 2			
T 14	2 46	22 32	1 49	11 39	0 35	14 25	3 47	23 15	1 35	11 46	0 48	22 36	0 50	9 52	0 36	20 19	1 36	13 25	17 9	23 18	23 19	18 57	8 18	1 2			
F 15	2 22	23 23	0 46	11 42	0 22	14 21	3 39	23 20	1 35	11 41	0 49	22 36	0 50	9 51	0 36	20 19	1 36	13 26	17 9	23 18	23 19	18 55	8 20	1 2			
S 16	1 59	23 7	0n17	11 43	0 9	14 16	3 32	23 25	1 35	11 37	0 49	22 36	0 50	9 50	0 36	20 19	1 36	13 27	17 9	23 18	23 18	18 53	8 21	1 2			
S 17	1 35	21 49	1 19	11 43	0s 3	14 11	3 24	23 31	1 35	11 32	0 49	22 36	0 49	9 49	0 36	20 18	1 36	13 27	17 10	23 18	23 18	18 51	8 22	1 2			
M 18	1 11	19 34	2 17	11 40	0 15	14 5	3 16	23 36	1 35	11 27	0 49	22 37	0 49	9 49	0 36	20 18	1 36	13 28	17 10	23 18	23 18	18 49	8 23	1 2			
T 19	0 48	16 30	3 10	11 36	0 26	13 59	3 8	23 40	1 35	11 22	0 49	22 37	0 49	9 48	0 36	20 18	1 36	13 29	17 10	23 18	23 18	18 47	8 24	1 2			
W 20	0 24	12 44	3 54	11 29	0 37	13 52	3 0	23 45	1 35	11 17	0 49	22 37	0 49	9 47	0 36	20 18	1 36	13 30	17 10	23 18	23 18	18 45	8 26	1 2			
T 21	0 0	8 25	4 28	11 21	0 47	13 45	2 53	23 50	1 35	11 13	0 49	22 37	0 49	9 46	0 36	20 18	1 36	13 30	17 10	23 17	23 18	18 43	8 27	1 2			
F 22	0n24	3 43	4 51	11 11	0 57	13 37	2 45	23 54	1 35	11 8	0 49	22 37	0 48	9 46	0 37	20 18	1 37	13 31	17 10	23 17	23 18	18 42	8 28	1 1			
S 23	0 47	1n13	5 0	10 59	1 7	13 29	2 37	23 59	1 35	11 3	0 50	22 38	0 48	9 45	0 37	20 18	1 37	13 32	17 10	23 16	23 17	18 40	8 29	1 1			
S 24	1 11	6 12	4 55	10 46	1 15	13 20	2 30	24 3	1 35	10 58	0 50	22 38	0 48	9 44	0 37	20 18	1 37	13 32	17 10	23 15	23 17	18 38	8 30	1 1			
M 25	1 35	10 59	4 34	10 31	1 24	13 11	2 23	24 7	1 35	10 53	0 50	22 38	0 48	9 43	0 37	20 18	1 37	13 33	17 10	23 14	23 17	18 36	8 32	1 1			
T 26	1 58	15 21	3 58	10 15	1 32	13 1	2 15	24 11	1 35	10 49	0 50	22 38	0 48	9 42	0 37	20 18	1 37	13 34	17 10	23 14	23 17	18 34	8 33	1 1			
W 27	2 22	19 0	3 8	9 57	1 39	12 51	2 8	24 15	1 35	10 44	0 50	22 39	0 48	9 41	0 37	20 18	1 37	13 35	17 10	23 13	23 17	18 32	8 34	1 1			
T 28	2 45	21 39	2 8	9 37	1 46	12 40	2 1	24 18	1 35	10 39	0 50	22 39	0 47	9 41	0 37	20 17	1 37	13 35	17 10	23 13	23 17	18 30	8 35	1 1			
F 29	3 9	23 5	0 59	9 16	1 53	12 29	1 54	24 22	1 35	10 35	0 50	22 39	0 47	9 40	0 37	20 17	1 37	13 36	17 10	23 13	23 16	18 28	8 37	1 1			
S 30	3 32	23 6	0s14	8 54	1 58	12 18	1 47	24 25	1 35	10 30	0 51	22 39	0 47	9 39	0 37	20 17	1 37	13 37	17 10	23 13	23 16	18 26	8 38	1 1			
S 31	3n55	21n41	1s27	8s30	2s 4	12s 6	1n40	24n28	1n35	10s25	0s51	22n39	0s47	9s38	0n37	20s17	1n37	13n37	17n10	23s13	23s16	18s24	8n39	1n 1			

ASTRODIENST EPHEMERIS for the year 1974  
geocentric

APRIL 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	12 35 54	10°53'24	23°5 5	14°31'3	24°31	18°35	5°20	28°44	26°R23	9°R31	5°R19	22°R16	23°10	25°20	19°47	M 1
T 2	12 39 50	11°52'36	7°20	15°50	25°29	19°10	5°33	28°47	26°21	9°30	5°18	22°13	23° 6	25°27	19°51	T 2
W 3	12 43 47	12°51'45	21°40	17°11	26°27	19°45	5°46	28°51	26°18	9°29	5°16	22° 9	23° 3	25°33	19°54	W 3
T 4	12 47 43	13°50'52	6°1 1	18°34	27°26	20°20	5°59	28°54	26°16	9°29	5°14	22° 1	23° 0	25°40	19°58	T 4
F 5	12 51 40	14°49'57	20°19	19°58	28°25	20°56	6°12	28°58	26°14	9°28	5°13	21°52	22°57	25°47	20° 1	F 5
S 6	12 55 36	15°49'00	4°29	21°24	29°24	21°31	6°25	29° 2	26°11	9°27	5°11	21°41	22°54	25°53	20° 5	S 6
S 7	12 59 33	16°48'00	18°24	22°52	0°24	22° 6	6°37	29° 6	26° 8	9°26	5° 9	21°31	22°50	26° 0	20° 8	S 7
M 8	13 3 29	17°46'59	2°1 1	24°21	1°25	22°41	6°50	29°10	26° 6	9°25	5° 8	21°21	22°47	26° 7	20°12	M 8
T 9	13 7 26	18°45'56	15°17	25°52	2°25	23°17	7° 2	29°14	26° 3	9°25	5° 6	21°14	22°44	26°13	20°15	T 9
W10	13 11 22	19°44'51	28°10	27°25	3°26	23°52	7°15	29°18	26° 1	9°24	5° 5	21° 9	22°41	26°20	20°19	W10
T 11	13 15 19	20°43'44	10°44	28°59	4°27	24°28	7°27	29°23	25°58	9°23	5° 3	21° 6	22°38	26°27	20°22	T 11
F 12	13 19 16	21°42'35	22°59	0°35	5°29	25° 3	7°39	29°27	25°56	9°22	5° 1	21°D 6	22°35	26°33	20°26	F 12
S 13	13 23 12	22°41'25	5° 1	2°12	6°31	25°38	7°52	29°32	25°53	9°21	5° 0	21° 7	22°31	26°40	20°30	S 13
S 14	13 27 9	23°40'13	16°55	3°51	7°33	26°14	8° 4	29°36	25°51	9°20	4°58	21° 7	22°28	26°47	20°33	S 14
M15	13 31 5	24°38'59	28°44	5°32	8°35	26°50	8°16	29°41	25°48	9°19	4°57	21°R 8	22°25	26°53	20°37	M15
T 16	13 35 2	25°37'43	10°35	7°14	9°38	27°25	8°28	29°46	25°45	9°18	4°55	21° 6	22°22	27° 0	20°40	T 16
W17	13 38 58	26°36'25	22°34	8°57	10°41	28° 1	8°40	29°50	25°43	9°17	4°54	21° 3	22°19	27° 7	20°44	W17
T 18	13 42 55	27°35'06	4°43	10°43	11°44	28°36	8°52	29°55	25°40	9°16	4°52	20°57	22°16	27°14	20°47	T 18
F 19	13 46 51	28°33'45	17° 8	12°29	12°48	29°12	9° 3	0° 0	25°38	9°15	4°51	20°50	22°12	27°20	20°51	F 19
S 20	13 50 48	29°32'23	29°49	14°18	13°51	29°48	9°15	0° 5	25°35	9°13	4°49	20°41	22° 9	27°27	20°54	S 20
S 21	13 54 45	0°30'58	12°49	16° 8	14°55	0°23	9°27	0°10	25°33	9°12	4°48	20°32	22° 6	27°34	20°58	S 21
M22	13 58 41	1°29'32	26° 8	18° 0	15°59	0°59	9°38	0°16	25°30	9°11	4°46	20°24	22° 3	27°40	21° 1	M22
T 23	14 2 38	2°28'04	9°42	19°53	17° 4	1°35	9°50	0°21	25°28	9°10	4°45	20°17	22° 0	27°47	21° 5	T 23
W24	14 6 34	3°26'34	23°31	21°48	18° 8	2°11	10° 1	0°26	25°25	9° 9	4°43	20°12	21°56	27°54	21° 9	W24
T 25	14 10 31	4°25'02	7°29	23°45	19°13	2°47	10°12	0°32	25°22	9° 7	4°42	20° 9	21°53	28° 0	21°12	T 25
F 26	14 14 27	5°23'28	21°35	25°43	20°18	3°22	10°23	0°37	25°20	9° 6	4°41	20°D 8	21°50	28° 7	21°15	F 26
S 27	14 18 24	6°21'52	5°44	27°43	21°23	3°58	10°34	0°43	25°17	9° 5	4°39	20° 9	21°47	28°14	21°19	S 27
S 28	14 22 20	7°20'14	19°55	29°44	22°28	4°34	10°45	0°48	25°15	9° 4	4°38	20°10	21°44	28°20	21°22	S 28
M29	14 26 17	8°18'33	4°6	1°47	23°34	5°10	10°56	0°54	25°12	9° 2	4°37	20°R11	21°41	28°27	21°26	M29
T 30	14 30 14	9°16'51	18°15	3°51	24°39	5°46	11° 7	1° 0	25°10	9° 1	4°35	20°11	21°37	28°34	21°29	T 30

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	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	lat	
M 1	4n19	18n54	2s36	8s 4	2s 9	11s53	1n33	24n31	1n34	10s21	0s51	22n40	0s47	9s37	0n37	20s17	1n37	13n38	17n10	23s13	23s16	18s22	8n40	1n 1
T 2	4 42	14 58	3 35	7 38	2 13	11 40	1 26	24 34	1 34	10 16	0 51	22 40	0 46	9 36	0 37	20 17	1 37	13 38	17 10	23 13	23 16	18 20	8 42	1 1
W 3	5 5	10 10	4 21	7 10	2 17	11 27	1 20	24 37	1 34	10 11	0 51	22 40	0 46	9 35	0 37	20 17	1 37	13 39	17 10	23 13	23 16	18 19	8 43	1 0
T 4	5 28	4 48	4 51	6 41	2 21	11 13	1 13	24 39	1 34	10 7	0 51	22 40	0 46	9 34	0 37	20 16	1 37	13 40	17 10	23 12	23 15	18 17	8 44	1 0
F 5	5 51	0s48	5 3	6 10	2 24	10 59	1 7	24 42	1 34	10 2	0 51	22 40	0 46	9 33	0 37	20 16	1 37	13 40	17 10	23 12	23 15	18 15	8 46	1 0
S 6	6 13	6 18	4 55	5 39	2 26	10 44	1 0	24 44	1 34	9 58	0 52	22 41	0 46	9 33	0 37	20 16	1 37	13 41	17 10	23 11	23 15	18 13	8 47	1 0
S 7	6 36	11 23	4 30	5 6	2 28	10 29	0 54	24 46	1 34	9 53	0 52	22 41	0 46	9 32	0 37	20 16	1 37	13 41	17 10	23 10	23 15	18 11	8 48	1 0
M 8	6 59	15 47	3 51	4 32	2 29	10 14	0 48	24 48	1 34	9 49	0 52	22 41	0 45	9 31	0 37	20 16	1 37	13 42	17 10	23 10	23 15	18 9	8 49	1 0
T 9	7 21	19 16	2 59	3 56	2 30	9 58	0 42	24 50	1 34	9 44	0 52	22 41	0 45	9 30	0 37	20 16	1 37	13 42	17 10	23 9	23 15	18 7	8 51	1 0
W10	7 43	21 42	1 59	3 20	2 31	9 42	0 36	24 51	1 34	9 40	0 52	22 41	0 45	9 29	0 37	20 16	1 37	13 43	17 10	23 9	23 14	18 5	8 52	1 0
T 11	8 6	22 58	0 55	2 43	2 31	9 25	0 30	24 53	1 33	9 35	0 52	22 42	0 45	9 28	0 37	20 15	1 37	13 44	17 10	23 9	23 14	18 3	8 53	1 0
F 12	8 28	23 5	0n10	2 4	2 30	9 8	0 24	24 54	1 33	9 31	0 53	22 42	0 45	9 27	0 37	20 15	1 37	13 44	17 10	23 9	23 14	18 1	8 54	1 0
S 13	8 50	22 7	1 14	1 24	2 29	8 50	0 18	24 55	1 33	9 26	0 53	22 42	0 45	9 26	0 37	20 15	1 37	13 45	17 10	23 9	23 14	17 59	8 56	1 0
S 14	9 11	20 10	2 14	0 44	2 27	8 32	0 13	24 56	1 33	9 22	0 53	22 42	0 44	9 25	0 37	20 15	1 37	13 45	17 9	23 9	23 14	17 57	8 57	1 0
M15	9 33	17 21	3 8	0 2	2 25	8 14	0 7	24 57	1 33	9 17	0 53	22 42	0 44	9 24	0 37	20 15	1 38	13 45	17 9	23 9	23 14	17 55	8 58	1 0
T 16	9 55	13 50	3 54	0n41	2 23	7 56	0 2	24 58	1 33	9 13	0 53	22 42	0 44	9 23	0 37	20 14	1 38	13 46	17 9	23 9	23 13	17 53	9 0	1 0
W17	10 16	9 44	4 30	1 25	2 20	7 37	0s 3	24 58	1 33	9 9	0 53	22 43	0 44	9 22	0 37	20 14	1 38	13 46	17 9	23 8	23 13	17 51	9 1	1 0
T 18	10 37	5 13	4 54	2 9	2 16	7 18	0 8	24 58	1 32	9 5	0 54	22 43	0 44	9 21	0 37	20 14	1 38	13 47	17 9	23 8	23 13	17 49	9 2	0 59
F 19	10 58	0 23	5 6	2 55	2 12	6 58	0 13	24 59	1 32	9 0	0 54	22 43	0 44	9 21	0 37	20 14	1 38	13 47	17 9	23 8	23 13	17 47	9 3	0 59
S 20	11 19	4n33	5 3	3 41	2 7	6 38	0 18	24 59	1 32	8 56	0 54	22 43	0 44	9 20	0 37	20 14	1 38	13 48	17 8	23 7	23 13	17 45	9 5	0 59
S 21	11 39	9 25	4 44	4 28	2 2	6 18	0 23	24 58	1 32	8 52	0 54	22 43	0 43	9 19	0 36	20 13	1 38	13 48	17 8	23 6	23 12	17 43	9 6	0 59
M22	12 0	13 58	4 10	5 16	1 57	5 57	0 28	24 58	1 32	8 48	0 54	22 43	0 43	9 18	0 36	20 13	1 38	13 48	17 8	23 6	23 12	17 41	9 7	0 59
T 23	12 20	17 53	3 20	6 4	1 50	5 37	0 32	24 58	1 32	8 44	0 54	22 43	0 43	9 17	0 36	20 13	1 38	13 49	17 8	23 5	23 12	17 39	9 9	0 59
W24	12 40	20 53	2 19	6 53	1 44	5 16	0 37	24 57	1 31	8 39	0 55	22 44	0 43	9 16	0 36	20 13	1 38	13 49	17 7	23 5	23 12	17 37	9 10	0 59
T 25	13 0	22 41	1 8	7 43	1 37	4 54	0 41	24 56	1 31	8 35	0 55	22 44	0 43	9 15	0 36	20 13	1 38	13 49	17 7	23 5	23 12	17 35	9 11	0 59
F 26	13 19	23 3	0s 8	8 33	1 29	4 33	0 46	24 55	1 31	8 31	0 55	22 44	0 43	9 14	0 36	20 12	1 38	13 50	17 7	23 5	23 11	17 33	9 12	0 59
S 27	13 39	21 56	1 23	9 24	1 21	4 11	0 50	24 54	1 31	8 27	0 55	22 44	0 42	9 13	0 36	20 12	1 38	13 50	17 7	23 5	23 11	17 31	9 14	0 59
S 28	13 58	19 25	2 34	10 15	1 13	3 49	0 54	24 52	1 31	8 23	0 55	22 44	0 42	9 12	0 36	20 12	1 38	13 50	17 6	23 5	23 11	17 29	9 15	0 59
M29	14 17	15 44	3 36	11 6	1 4	3 26	0 58	24 51	1 31	8 20	0 56	22 44	0 42	9 11	0 36	20 12	1 38	13 51	17 6	23 5	23 11	17 27	9 16	0 59
T 30	14n35	11n11	4s24	11n57	0s55	3s 4	1s 2	24n49	1n30	8s16	0s56	22n44	0s42	9s10	0n36	20s11	1n38	13n51	17n 6	23s 5	23s11	17s25	9n17	0n59

ASTRODIENST EPHEMERIS for the year 1974  
geocentric

MAY 1974

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Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	14 34 10	10♈15'06	2♊20	5♊56	25♋45	6♌22	11♍17	1♎6	25°R 7	8°R59	4°R34	20°R 9	21♎34	28♏40	21♐33	W 1
T 2	14 38 7	11°13'20	16°20	8° 3	26°51	6°58	11°28	1°12	25♎ 5	8♎58	4♎33	20♎ 5	21°31	28°47	21°36	T 2
F 3	14 42 3	12°11'31	0♌12	10°11	27°57	7°34	11°38	1°18	25° 3	8°57	4°32	20° 0	21°28	28°54	21°40	F 3
S 4	14 46 0	13° 9'40	13°54	12°20	29° 4	8°10	11°49	1°24	25° 0	8°55	4°30	19°55	21°25	29° 0	21°43	S 4
S 5	14 49 56	14° 7'48	27°23	14°29	0♍10	8°46	11°59	1°30	24°58	8°54	4°29	19°49	21°21	29° 7	21°46	S 5
M 6	14 53 53	15° 5'54	10♎37	16°39	1°17	9°22	12° 9	1°36	24°55	8°52	4°28	19°44	21°18	29°14	21°50	M 6
T 7	14 57 49	16° 3'58	23°35	18°49	2°23	9°58	12°19	1°42	24°53	8°51	4°27	19°40	21°15	29°20	21°53	T 7
W 8	15 1 46	17° 2'00	6♎16	20°59	3°30	10°34	12°29	1°48	24°51	8°50	4°26	19°37	21°12	29°27	21°56	W 8
T 9	15 5 43	18° 0'01	18°41	23° 9	4°37	11°10	12°38	1°55	24°48	8°48	4°25	19°D36	21° 9	29°34	22° 0	T 9
F 10	15 9 39	18°58'01	0♏53	25°18	5°44	11°46	12°48	2° 1	24°46	8°47	4°24	19°37	21° 6	29°40	22° 3	F 10
S 11	15 13 36	19°55'59	12°54	27°27	6°52	12°23	12°58	2° 8	24°44	8°45	4°22	19°38	21° 2	29°47	22° 6	S 11
S 12	15 17 32	20°53'56	24°47	29°34	7°59	12°59	13° 7	2°14	24°42	8°44	4°21	19°40	20°59	29°54	22° 9	S 12
M13	15 21 29	21°51'51	6♎38	1♐40	9° 7	13°35	13°16	2°21	24°39	8°42	4°20	19°42	20°56	0♎ 0	22°12	M13
T 14	15 25 25	22°49'45	18°30	3°44	10°14	14°11	13°25	2°27	24°37	8°40	4°19	19°R43	20°53	0° 7	22°16	T 14
W15	15 29 22	23°47'38	0♋29	5°47	11°22	14°47	13°34	2°34	24°35	8°39	4°19	19°42	20°50	0°14	22°19	W15
T 16	15 33 18	24°45'30	12°39	7°47	12°30	15°24	13°43	2°41	24°33	8°37	4°18	19°41	20°47	0°20	22°22	T 16
F 17	15 37 15	25°43'20	25° 5	9°44	13°38	16° 0	13°52	2°47	24°31	8°36	4°17	19°39	20°43	0°27	22°25	F 17
S 18	15 41 12	26°41'09	7♍50	11°40	14°46	16°36	14° 1	2°54	24°29	8°34	4°16	19°36	20°40	0°34	22°28	S 18
S 19	15 45 8	27°38'57	20°57	13°32	15°54	17°12	14° 9	3° 1	24°27	8°33	4°15	19°33	20°37	0°40	22°31	S 19
M20	15 49 5	28°36'44	4♌27	15°22	17° 2	17°49	14°18	3° 8	24°25	8°31	4°14	19°30	20°34	0°47	22°34	M20
T 21	15 53 1	29°34'30	18°17	17° 9	18°11	18°25	14°26	3°15	24°23	8°29	4°13	19°27	20°31	0°54	22°37	T 21
W22	15 56 58	0♐32'14	2♐26	18°53	19°19	19° 1	14°34	3°22	24°21	8°28	4°13	19°26	20°27	1° 0	22°40	W22
T 23	16 0 54	1°29'57	16°50	20°34	20°28	19°38	14°42	3°29	24°19	8°26	4°12	19°D25	20°24	1° 7	22°43	T 23
F 24	16 4 51	2°27'39	1♌22	22°12	21°36	20°14	14°50	3°36	24°17	8°25	4°11	19°25	20°21	1°14	22°46	F 24
S 25	16 8 47	3°25'19	15°57	23°47	22°45	20°51	14°57	3°43	24°15	8°23	4°11	19°26	20°18	1°20	22°49	S 25
S 26	16 12 44	4°22'58	0♑29	25°18	23°54	21°27	15° 5	3°50	24°14	8°21	4°10	19°27	20°15	1°27	22°52	S 26
M27	16 16 41	5°20'35	14°55	26°47	25° 3	22° 3	15°12	3°57	24°12	8°20	4° 9	19°28	20°12	1°34	22°55	M27
T 28	16 20 37	6°18'11	29°10	28°12	26°12	22°40	15°20	4° 4	24°10	8°18	4° 9	19°29	20° 8	1°41	22°57	T 28
W29	16 24 34	7°15'45	13♎12	29°33	27°21	23°16	15°27	4°12	24° 9	8°17	4° 8	19°R29	20° 5	1°47	23° 0	W29
T 30	16 28 30	8°13'18	27° 0	0♒52	28°30	23°53	15°34	4°19	24° 7	8°15	4° 8	19°28	20° 2	1°54	23° 3	T 30
F 31	16 32 27	9♐10'49	10♌34	2♑ 7	29♍39	24♌29	15♋40	4♎26	24♎ 5	8♎13	4♎ 7	19♎27	19♎59	2♎ 1	23♍ 6	F 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
W 1	14n54	6n 2	4s56	12n48	0s45	2s41	1 s 5	24n47	1n30	8s12	0s56	22n44	0s42	9s10	0n36	20s11	1n38	13n51	17n 6	23s 5	23s10	17s23	9n19	0n59
T 2	15 12	0 38	5 10	13 38	0 35	2 18	1 9	24 45	1 30	8 8	0 56	22 44	0 42	9 9	0 36	20 11	1 38	13 51	17 5	23 4	23 10	17 21	9 20	0 59
F 3	15 30	4s45	5 5	14 29	0 25	1 55	1 12	24 43	1 30	8 4	0 56	22 45	0 42	9 8	0 36	20 11	1 38	13 51	17 5	23 4	23 10	17 19	9 21	0 59
S 4	15 47	9 50	4 44	15 18	0 15	1 32	1 16	24 41	1 30	8 0	0 57	22 45	0 41	9 7	0 36	20 11	1 38	13 52	17 5	23 4	23 10	17 17	9 22	0 59
S 5	16 5	14 22	4 7	16 7	0 4	1 8	1 19	24 38	1 29	7 57	0 57	22 45	0 41	9 6	0 36	20 10	1 38	13 52	17 4	23 3	23 10	17 15	9 23	0 59
M 6	16 22	18 7	3 17	16 55	0n 6	0 45	1 22	24 36	1 29	7 53	0 57	22 45	0 41	9 5	0 36	20 10	1 38	13 52	17 4	23 3	23 9	17 13	9 25	0 58
T 7	16 39	20 53	2 17	17 42	0 17	0 21	1 25	24 33	1 29	7 49	0 57	22 45	0 41	9 4	0 36	20 10	1 38	13 52	17 4	23 3	23 9	17 11	9 26	0 58
W 8	16 55	22 33	1 12	18 27	0 27	0n 3	1 28	24 30	1 29	7 46	0 58	22 45	0 41	9 4	0 36	20 10	1 38	13 52	17 3	23 2	23 9	17 9	9 27	0 58
T 9	17 12	23 3	0 5	19 10	0 38	0 27	1 31	24 27	1 29	7 42	0 58	22 45	0 41	9 3	0 36	20 9	1 38	13 52	17 3	23 2	23 9	17 7	9 28	0 58
F 10	17 28	22 25	1n 1	19 52	0 48	0 51	1 34	24 23	1 28	7 39	0 58	22 45	0 41	9 2	0 36	20 9	1 38	13 52	17 3	23 2	23 9	17 5	9 29	0 58
S 11	17 44	20 45	2 4	20 32	0 58	1 15	1 36	24 20	1 28	7 35	0 58	22 45	0 40	9 1	0 36	20 9	1 38	13 53	17 2	23 2	23 8	17 3	9 31	0 58
S 12	17 59	18 12	3 1	21 10	1 8	1 39	1 39	24 16	1 28	7 32	0 58	22 45	0 40	9 0	0 36	20 9	1 38	13 53	17 2	23 2	23 8	17 1	9 32	0 58
M13	18 14	14 54	3 50	21 45	1 17	2 4	1 41	24 12	1 28	7 29	0 59	22 45	0 40	9 0	0 36	20 8	1 38	13 53	17 2	23 3	23 8	16 59	9 33	0 58
T 14	18 29	11 1	4 29	22 18	1 25	2 28	1 43	24 8	1 27	7 25	0 59	22 45	0 40	8 59	0 36	20 8	1 38	13 53	17 1	23 3	23 8	16 56	9 34	0 58
W15	18 43	6 40	4 57	22 48	1 34	2 53	1 45	24 4	1 27	7 22	0 59	22 45	0 40	8 58	0 36	20 8	1 38	13 53	17 1	23 3	23 7	16 54	9 35	0 58
T 16	18 58	2 0	5 12	23 16	1 41	3 17	1 47	24 0	1 27	7 19	0 59	22 45	0 40	8 57	0 36	20 8	1 38	13 53	17 0	23 3	23 7	16 52	9 36	0 58
F 17	19 12	2n50	5 13	23 42	1 48	3 42	1 49	23 55	1 27	7 16	1 0	22 45	0 40	8 57	0 36	20 7	1 38	13 53	17 0	23 2	23 7	16 50	9 37	0 58
S 18	19 25	7 41	4 59	24 4	1 54	4 7	1 51	23 51	1 27	7 13	1 0	22 45	0 40	8 56	0 36	20 7	1 38	13 53	17 0	23 2	23 7	16 48	9 39	0 58
S 19	19 38	12 20	4 29	24 24	2 0	4 31	1 53	23 46	1 26	7 10	1 0	22 45	0 39	8 55	0 36	20 7	1 38	13 53	16 59	23 2	23 7	16 46	9 40	0 58
M20	19 51	16 30	3 43	24 42	2 4	4 56	1 55	23 41	1 26	7 7	1 0	22 45	0 39	8 54	0 36	20 7	1 38	13 53	16 59	23 2	23 6	16 44	9 41	0 58
T 21	20 4	19 53	2 43	24 57	2 8	5 20	1 56	23 36	1 26	7 4	1 1	22 45	0 39	8 54	0 36	20 6	1 38	13 52	16 58	23 1	23 6	16 42	9 42	0 58
W22	20 16	22 10	1 32	25 10	2 12	5 45	1 57	23 30	1 26	7 1	1 1	22 45	0 39	8 53	0 36	20 6	1 38	13 52	16 58	23 1	23 6	16 40	9 43	0 58
T 23	20 28	23 2	0 14	25 20	2 14	6 10	1 59	23 25	1 25	6 58	1 1	22 45	0 39	8 52	0 36	20 6	1 38	13 52	16 57	23 1	23 6	16 38	9 44	0 58
F 24	20 39	22 21	1s 6	25 28	2 15	6 34	2 0	23 19	1 25	6 55	1 1	22 45	0 39	8 52	0 36	20 6	1 38	13 52	16 57	23 1	23 5	16 36	9 45	0 58
S 25	20 50	20 9	2 21	25 34	2 16	6 59	2 1	23 13	1 25	6 52	1 2	22 45	0 39	8 51	0 36	20 5	1 38	13 52	16 57	23 1	23 5	16 34	9 46	0 58
S 26	21 1	16 40	3 28	25 37	2 16	7 23	2 2	23 8	1 25	6 50	1 2	22 45	0 39	8 50	0 36	20 5	1 38	13 52	16 56	23 1	23 5	16 32	9 47	0 58
M27	21 12	12 12	4 21	25 39	2 15	7 47	2 3	23 1	1 24	6 47	1 2	22 45	0 38	8 50	0 36	20 5	1 38	13 52	16 56	23 1	23 5	16 29	9 48	0 58
T 28	21 22	7 7	4 57	25 39	2 13	8 12	2 3	22 55	1 24	6 45	1 2	22 44	0 38	8 49	0 36	20 5	1 38	13 51	16 55	23 2	23 5	16 27	9 49	0 58
W29	21 31	1 45	5 15	25 37	2 11	8 36	2 4	22 49	1 24	6 42	1 3	22 44	0 38	8 49	0 36	20 4	1 38	13 51	16 55	23 2	23 4	16 25	9 50	0 58
T 30	21 41	3s37	5 14	25 34	2 7	9 0	2 5	22 42	1 24	6 40	1 3	22 44	0 38	8 48	0 36	20 4	1 38	13 51	16 54	23 1	23 4	16 23	9 51	0 58
F 31	21n50	8s43	4s55	25n28	2n 3	9n24	2s 5	22n36	1n23	6s37	1s 3	22n44	0s38	8s48	0n36	20s 4	1n38	13n51	16n54	23s 1	23s 4	16s21	9n52	0n58



## ASTRODIENST EPHEMERIS for the year 1974

geocentric

JUNE 1974

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 36 23	10 <sup>II</sup> 8'19	23 <sup>♂</sup> 53	3 <sup>♂</sup> 18	0 <sup>♂</sup> 48	25 <sup>♂</sup> 6	15 <sup>♂</sup> 47	4 <sup>♂</sup> 34	24 <sup>♂</sup> R 4	8 <sup>♂</sup> R12	4 <sup>♂</sup> R 7	19 <sup>♂</sup> R26	19 <sup>♂</sup> ♂56	2 <sup>♂</sup> ♂ 7	23 <sup>♂</sup> ♂ 8	S 1
S 2	16 40 20	11° 5'48	6 <sup>♂</sup> ♂58	4°26	1°57	25°42	15°53	4°41	24 <sup>♂</sup> ♂ 2	8 <sup>♂</sup> ♂10	4 <sup>♂</sup> ♂ 6	19 <sup>♂</sup> ♂25	19°53	2°14	23°11	S 2
M 3	16 44 16	12° 3'16	19°48	5°31	3° 7	26°19	16° 0	4°48	24° 1	8° 8	4° 6	19°24	19°49	2°21	23°14	M 3
T 4	16 48 13	13° 0'43	2 <sup>♂</sup> ♂26	6°32	4°16	26°56	16° 6	4°56	24° 0	8° 7	4° 6	19°24	19°46	2°27	23°16	T 4
W 5	16 52 10	13°58'08	14°50	7°29	5°26	27°32	16°12	5° 3	23°58	8° 5	4° 5	19°D23	19°43	2°34	23°19	W 5
T 6	16 56 6	14°55'33	27° 4	8°22	6°35	28° 9	16°18	5°11	23°57	8° 4	4° 5	19°23	19°40	2°41	23°21	T 6
F 7	17 0 3	15°52'57	9 <sup>♂</sup> ♂ 8	9°12	7°45	28°45	16°24	5°18	23°56	8° 2	4° 5	19°24	19°37	2°47	23°24	F 7
S 8	17 3 59	16°50'20	21° 5	9°57	8°55	29°22	16°29	5°26	23°54	8° 0	4° 4	19°24	19°33	2°54	23°26	S 8
S 9	17 7 56	17°47'42	2 <sup>♂</sup> ♂57	10°39	10° 5	29°59	16°34	5°33	23°53	7°59	4° 4	19°24	19°30	3° 1	23°28	S 9
M10	17 11 52	18°45'04	14°47	11°16	11°15	0 <sup>♂</sup> ♂35	16°40	5°41	23°52	7°57	4° 4	19°24	19°27	3° 7	23°31	M10
T 11	17 15 49	19°42'25	26°40	11°50	12°25	1°12	16°45	5°49	23°51	7°56	4° 4	19°R24	19°24	3°14	23°33	T 11
W12	17 19 45	20°39'46	8 <sup>♂</sup> ♂38	12°19	13°35	1°49	16°49	5°56	23°50	7°54	4° 4	19°24	19°21	3°21	23°35	W12
T 13	17 23 42	21°37'06	20°47	12°43	14°45	2°25	16°54	6° 4	23°49	7°52	4° 4	19°D24	19°18	3°27	23°38	T 13
F 14	17 27 39	22°34'25	3 <sup>♂</sup> ♂12	13° 3	15°55	3° 2	16°59	6°11	23°48	7°51	4° 4	19°24	19°14	3°34	23°40	F 14
S 15	17 31 35	23°31'44	15°55	13°19	17° 5	3°39	17° 3	6°19	23°47	7°49	4°D 4	19°24	19°11	3°41	23°42	S 15
S 16	17 35 32	24°29'03	29° 1	13°30	18°15	4°16	17° 7	6°27	23°46	7°48	4° 4	19°25	19° 8	3°47	23°44	S 16
M17	17 39 28	25°26'22	12 <sup>♂</sup> ♂32	13°37	19°26	4°52	17°11	6°35	23°45	7°46	4° 4	19°25	19° 5	3°54	23°46	M17
T 18	17 43 25	26°23'40	26°28	13°R39	20°36	5°29	17°15	6°42	23°45	7°45	4° 4	19°26	19° 2	4° 1	23°48	T 18
W19	17 47 21	27°20'58	10 <sup>II</sup> ♂48	13°36	21°46	6° 6	17°19	6°50	23°44	7°43	4° 4	19°26	18°59	4° 8	23°50	W19
T 20	17 51 18	28°18'16	25°27	13°29	22°57	6°43	17°22	6°58	23°43	7°42	4° 4	19°R26	18°55	4°14	23°52	T 20
F 21	17 55 15	29°15'33	10 <sup>♂</sup> ♂21	13°18	24° 7	7°20	17°25	7° 6	23°43	7°40	4° 5	19°26	18°52	4°21	23°54	F 21
S 22	17 59 11	0 <sup>♂</sup> ♂12'49	25°20	13° 3	25°18	7°57	17°28	7°13	23°42	7°39	4° 5	19°25	18°49	4°28	23°56	S 22
S 23	18 3 8	1°10'05	10 <sup>♂</sup> ♂16	12°43	26°29	8°33	17°31	7°21	23°42	7°37	4° 5	19°24	18°46	4°34	23°58	S 23
M24	18 7 4	2° 7'21	25° 1	12°20	27°39	9°10	17°34	7°29	23°41	7°36	4° 5	19°22	18°43	4°41	23°59	M24
T 25	18 11 1	3° 4'35	9 <sup>♂</sup> ♂31	11°54	28°50	9°47	17°37	7°37	23°41	7°34	4° 6	19°21	18°39	4°48	24° 1	T 25
W26	18 14 57	4° 1'49	23°40	11°25	0 <sup>II</sup> 1	10°24	17°39	7°45	23°40	7°33	4° 6	19°20	18°36	4°54	24° 3	W26
T 27	18 18 54	4°59'03	7 <sup>♂</sup> ♂27	10°53	1°12	11° 1	17°41	7°52	23°40	7°32	4° 6	19°D20	18°33	5° 1	24° 4	T 27
F 28	18 22 50	5°56'15	20°53	10°20	2°23	11°38	17°43	8° 0	23°40	7°30	4° 7	19°21	18°30	5° 8	24° 6	F 28
S 29	18 26 47	6°53'28	3 <sup>♂</sup> ♂58	9°45	3°33	12°15	17°45	8° 8	23°40	7°29	4° 7	19°22	18°27	5°14	24° 7	S 29
S 30	18 30 44	7 <sup>♂</sup> ♂50'40	16 <sup>♂</sup> ♂46	9 <sup>♂</sup> ♂ 9	4 <sup>II</sup> 44	12 <sup>♂</sup> ♂52	17 <sup>♂</sup> ♂46	8 <sup>♂</sup> ♂16	23 <sup>♂</sup> ♂40	7 <sup>♂</sup> ♂28	4 <sup>♂</sup> ♂ 8	19 <sup>♂</sup> ♂23	18 <sup>♂</sup> ♂24	5 <sup>♂</sup> ♂21	24 <sup>♂</sup> ♂ 9	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
S 1	21n58	13s19 4s21	25n22	1n58 9n48	2s 6 22n29	1n23 6s35	1s 3 22n44	0s38 8s47	0n36 20s 4	1n38 13n51	16n53	23s 1 23s 4	16s19 9n53	0n57		
S 2	22 7 17 12	3 34 25 14	1 52 10 11	2 6 22 22	1 23 6 33	1 4 22 44	0 38 8 46	0 36 20 3	1 38 13 50	16 53 23 1	23 3 16 17	9 54 0 57				
M 3	22 14 20 12	2 37 25 5	1 45 10 35	2 6 22 15	1 23 6 30	1 4 22 44	0 38 8 46	0 36 20 3	1 38 13 50	16 52 23 1	23 3 16 15	9 55 0 57				
T 4	22 22 20 12	1 33 24 54	1 38 10 58	2 6 22 7	1 22 6 28	1 4 22 43	0 38 8 46	0 36 20 3	1 38 13 50	16 52 23 1	23 3 16 13	9 56 0 57				
W 5	22 29 23 0	0 25 24 43	1 29 11 21	2 6 22 0	1 22 6 26	1 4 22 43	0 37 8 45	0 35 20 3	1 38 13 49	16 51 23 1	23 3 16 10	9 57 0 57				
T 6	22 35 22 42	0n43 24 31	1 20 11 44	2 6 21 52	1 22 6 24	1 5 22 43	0 37 8 45	0 35 20 2	1 38 13 49	16 51 23 1	23 2 16 8	9 58 0 57				
F 7	22 42 21 20	1 47 24 18	1 10 12 7	2 6 21 45	1 22 6 22	1 5 22 43	0 37 8 44	0 35 20 2	1 38 13 49	16 50 23 1	23 2 16 6	9 59 0 57				
S 8	22 47 19 2	2 47 24 4	1 0 12 29	2 5 21 37	1 21 6 20	1 5 22 43	0 37 8 44	0 35 20 2	1 38 13 48	16 50 23 1	23 2 16 4	9 59 0 57				
S 9	22 53 15 57	3 39 23 49	0 48 12 52	2 5 21 29	1 21 6 18	1 6 22 42	0 37 8 43	0 35 20 2	1 38 13 48	16 49 23 1	23 2 16 2	10 0 0 57				
M10	22 58 12 14	4 21 23 34	0 36 13 14	2 4 21 21	1 21 6 17	1 6 22 42	0 37 8 43	0 35 20 1	1 38 13 48	16 49 23 1	23 1 16 0	10 1 0 57				
T 11	23 3 8 2	4 53 23 18	0 23 13 36	2 4 21 12	1 21 6 15	1 6 22 42	0 37 8 43	0 35 20 1	1 38 13 47	16 48 23 1	23 1 15 58	10 2 0 57				
W12	23 7 3 31	5 12 23 2	0 10 13 57	2 3 21 4	1 20 6 13	1 6 22 42	0 37 8 42	0 35 20 1	1 38 13 47	16 48 23 1	23 1 15 56	10 3 0 57				
T 13	23 11 1n13	5 17 22 46	0s 4 14 19	2 3 20 55	1 20 6 12	1 7 22 42	0 37 8 42	0 35 20 1	1 38 13 46	16 47 23 1	23 1 15 53	10 4 0 57				
F 14	23 14 5 59	5 8 22 29	0 19 14 40	2 2 20 46	1 20 6 10	1 7 22 41	0 37 8 42	0 35 20 0	1 38 13 46	16 47 23 1	23 0 15 51	10 4 0 57				
S 15	23 17 10 38	4 44 22 13	0 34 15 0	2 1 20 38	1 19 6 9	1 7 22 41	0 36 8 41	0 35 20 0	1 38 13 45	16 46 23 1	23 0 15 49	10 5 0 57				
S 16	23 20 14 56	4 5 21 56	0 50 15 21	2 0 20 29	1 19 6 7	1 8 22 41	0 36 8 41	0 35 20 0	1 38 13 45	16 46 23 1	23 0 15 47	10 6 0 57				
M17	23 22 18 38	3 11 21 40	1 6 15 41	1 59 20 19	1 19 6 6	1 8 22 40	0 36 8 41	0 35 20 0	1 38 13 44	16 45 23 1	23 0 15 45	10 7 0 57				
T 18	23 24 21 23	2 4 21 23	1 22 16 1	1 58 20 10	1 19 6 5	1 8 22 40	0 36 8 40	0 35 20 0	1 38 13 44	16 45 23 1	22 59 15 43	10 7 0 57				
W19	23 25 22 51	0 48 21 7	1 38 16 20	1 56 20 1	1 18 6 4	1 8 22 40	0 36 8 40	0 35 19 59	1 38 13 43	16 44 23 1	22 59 15 41	10 8 0 57				
T 20	23 26 22 49	0s33 20 51	1 55 16 39	1 55 19 51	1 18 6 3	1 9 22 40	0 36 8 40	0 35 19 59	1 38 13 43	16 44 23 1	22 59 15 38	10 9 0 57				
F 21	23 26 21 9	1 53 20 36	2 12 16 58	1 54 19 42	1 18 6 2	1 9 22 39	0 36 8 40	0 35 19 59	1 38 13 42	16 43 23 1	22 59 15 36	10 9 0 57				
S 22	23 27 18 1	3 6 20 21	2 28 17 16	1 52 19 32	1 17 6 1	1 9 22 39	0 36 8 40	0 35 19 59	1 38 13 42	16 43 23 1	22 58 15 34	10 10 0 57				
S 23	23 26 13 44	4 6 20 7	2 44 17 34	1 51 19 22	1 17 6 0	1 10 22 39	0 36 8 40	0 35 19 58	1 38 13 41	16 42 23 1	22 58 15 32	10 11 0 57				
M24	23 25 8 39	4 48 19 53	3 0 17 52	1 49 19 12	1 17 5 59	1 10 22 38	0 36 8 39	0 35 19 58	1 38 13 41	16 42 23 1	22 58 15 30	10 11 0 57				
T 25	23 24 3 11	5 12 19 40	3 15 18 9	1 48 19 2	1 16 5 58	1 10 22 38	0 36 8 39	0 35 19 58	1 38 13 40	16 41 23 1	22 57 15 28	10 12 0 57				
W26	23 23 2s19	5 15 19 28	3 30 18 26	1 46 18 51	1 16 5 58	1 10 22 38	0 35 8 39	0 35 19 58	1 38 13 39	16 41 23 1	22 57 15 25	10 13 0 57				
T 27	23 21 7 34	5 1 19 17	3 43 18 42	1 44 18 41	1 16 5 57	1 11 22 37	0 35 8 39	0 35 19 58	1 38 13 39	16 40 23 1	22 57 15 23	10 13 0 57				
F 28	23 19 12 19	4 30 19 7	3 56 18 58	1 43 18 30	1 16 5 57	1 11 22 37	0 35 8 39	0 35 19 57	1 38 13 38	16 40 23 1	22 57 15 21	10 14 0 57				
S 29	23 16 16 23	3 45 18 58	4 7 19 13	1 41 18 20	1 15 5 56	1 11 22 36	0 35 8 39	0 35 19 57	1 38 13 37	16 39 23 1	22 56 15 19	10 14 0 57				
S 30	23n13	19s34 2s51	18n51 4s18	19n28 1s39	18n 9 1n15	5s56 1s12	22n36 0s35	8s39 0n35	19s57 1n38	13n37 16n39	23s 1 22s56	15s17 10n15	0n57			

Julian Day Number = 2442199.5, Delta T = 44.91 sec

Ecliptic obliquity = 23°26'31", Nutation = 0°00'16", out-of-bounds declination in red

# ASTRODIENST EPHEMERIS for the year 1974

## geocentric

JULY 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	18 34 40	8°47'51	29°18'18	8°R33	5°II55	13°Ω29	17°K48	8°Ω24	23°R40	7°R26	4°Ω 8	19°J24	18°J20	5°Ω28	24°V10	M 1
T 2	18 38 37	9°45'03	11°J38	7°Ω57	7° 6	14° 6	17°49	8°31	23°D40	7°J25	4° 9	19°25	18°17	5°34	24°12	T 2
W 3	18 42 33	10°42'14	23°49	7°22	8°18	14°43	17°50	8°39	23°Ω40	7°24	4° 9	19°R25	18°14	5°41	24°13	W 3
T 4	18 46 30	11°39'25	5°Ω51	6°49	9°29	15°20	17°51	8°47	23°40	7°22	4°10	19°24	18°11	5°48	24°14	T 4
F 5	18 50 26	12°36'36	17°47	6°18	10°40	15°57	17°51	8°55	23°40	7°21	4°11	19°22	18° 8	5°55	24°16	F 5
S 6	18 54 23	13°33'47	29°40	5°50	11°51	16°34	17°52	9° 3	23°40	7°20	4°11	19°19	18° 5	6° 1	24°17	S 6
S 7	18 58 19	14°30'58	11°Ω30	5°25	13° 3	17°11	17°52	9°10	23°40	7°19	4°12	19°15	18° 1	6° 8	24°18	S 7
M 8	19 2 16	15°28'09	23°21	5° 4	14°14	17°49	17°R52	9°18	23°40	7°17	4°13	19°11	17°58	6°15	24°19	M 8
T 9	19 6 13	16°25'21	5°K15	4°47	15°25	18°26	17°52	9°26	23°41	7°16	4°14	19° 7	17°55	6°21	24°20	T 9
W10	19 10 9	17°22'32	17°15	4°35	16°37	19° 3	17°51	9°34	23°41	7°15	4°14	19° 3	17°52	6°28	24°21	W10
T 11	19 14 6	18°19'44	29°24	4°27	17°48	19°40	17°51	9°41	23°42	7°14	4°15	19° 0	17°49	6°35	24°22	T 11
F 12	19 18 2	19°16'57	11°V47	4°D24	19° 0	20°17	17°50	9°49	23°42	7°13	4°16	18°59	17°45	6°41	24°23	F 12
S 13	19 21 59	20°14'10	24°26	4°26	20°12	20°55	17°49	9°57	23°43	7°12	4°17	18°D59	17°42	6°48	24°24	S 13
S 14	19 25 55	21°11'24	7°Ω27	4°33	21°23	21°32	17°48	10° 5	23°43	7°11	4°18	18°59	17°39	6°55	24°24	S 14
M15	19 29 52	22° 8'38	20°52	4°46	22°35	22° 9	17°47	10°12	23°44	7°10	4°19	19° 1	17°36	7° 1	24°25	M15
T 16	19 33 48	23° 5'53	4°II44	5° 5	23°47	22°46	17°45	10°20	23°45	7° 9	4°20	19° 2	17°33	7° 8	24°26	T 16
W17	19 37 45	24° 3'08	19° 2	5°28	24°59	23°24	17°44	10°28	23°45	7° 8	4°21	19°R 3	17°30	7°15	24°27	W17
T 18	19 41 42	25° 0'24	3°Ω45	5°58	26°10	24° 1	17°42	10°35	23°46	7° 7	4°22	19° 2	17°26	7°21	24°27	T 18
F 19	19 45 38	25°57'41	18°47	6°32	27°22	24°38	17°40	10°43	23°47	7° 6	4°23	19° 0	17°23	7°28	24°28	F 19
S 20	19 49 35	26°54'58	3°Ω59	7°12	28°34	25°16	17°37	10°51	23°48	7° 5	4°24	18°56	17°20	7°35	24°28	S 20
S 21	19 53 31	27°52'16	19°13	7°58	29°46	25°53	17°35	10°58	23°49	7° 4	4°25	18°50	17°17	7°42	24°29	S 21
M22	19 57 28	28°49'33	4°II16	8°49	0°Ω58	26°31	17°32	11° 6	23°50	7° 3	4°27	18°45	17°14	7°48	24°29	M22
T 23	20 1 24	29°46'52	19° 1	9°45	2°10	27° 8	17°29	11°13	23°51	7° 2	4°28	18°39	17°11	7°55	24°29	T 23
W24	20 5 21	0°Ω44'10	3°Ω22	10°47	3°23	27°45	17°26	11°21	23°52	7° 1	4°29	18°35	17° 7	8° 2	24°30	W24
T 25	20 9 17	1°41'29	17°15	11°53	4°35	28°23	17°23	11°28	23°53	7° 1	4°30	18°32	17° 4	8° 8	24°30	T 25
F 26	20 13 14	2°38'48	0°II41	13° 5	5°47	29° 0	17°19	11°36	23°55	7° 0	4°32	18°D31	17° 1	8°15	24°30	F 26
S 27	20 17 11	3°36'08	13°42	14°21	6°59	29°38	17°16	11°43	23°56	6°59	4°33	18°32	16°58	8°22	24°30	S 27
S 28	20 21 7	4°33'28	26°22	15°43	8°11	0°II16	17°12	11°51	23°57	6°58	4°34	18°33	16°55	8°28	24°30	S 28
M29	20 25 4	5°30'48	8°J45	17° 9	9°24	0°Ω3	17° 8	11°58	23°59	6°58	4°36	18°34	16°51	8°35	24°R30	M29
T 30	20 29 0	6°28'09	20°54	18°39	10°36	1°31	17° 4	12° 6	24° 0	6°57	4°37	18°R35	16°48	8°42	24°30	T 30
W31	20 32 57	7°Ω25'31	2°Ω54	20°Ω14	11°Ω49	2°II 8	17°K 0	12°Ω13	24°Ω 1	6°J57	4°Ω39	18°J33	16°J45	8°Ω48	24°V30	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
M 1	23n 9	21s46	1s49	18n44	4s27	19n43	1s37	17n58	1n15	5s56	1s12	22n36	0s35	8s39	0n35	19s57
T 2	23 5	22 53	0 43	18 39	4 34	19 56	1 35	17 47	1 14	5 56	1 12	22 35	0 35	8 39	0 35	19 57
W 3	23 1	22 54	0n24	18 35	4 40	20 10	1 33	17 36	1 14	5 55	1 13	22 35	0 35	8 39	0 34	19 57
T 4	22 56	21 50	1 29	18 32	4 44	20 23	1 31	17 25	1 14	5 55	1 13	22 34	0 35	8 39	0 34	19 56
F 5	22 51	19 47	2 30	18 31	4 47	20 35	1 28	17 13	1 13	5 55	1 13	22 34	0 35	8 39	0 34	19 56
S 6	22 45	16 54	3 23	18 31	4 48	20 47	1 26	17 2	1 13	5 56	1 14	22 33	0 35	8 39	0 34	19 56
S 7	22 39	13 21	4 8	18 32	4 48	20 59	1 24	16 50	1 13	5 56	1 14	22 33	0 35	8 39	0 34	19 56
M 8	22 33	9 17	4 42	18 35	4 46	21 10	1 22	16 39	1 12	5 56	1 14	22 33	0 34	8 40	0 34	19 56
T 9	22 26	4 52	5 4	18 39	4 43	21 20	1 19	16 27	1 12	5 56	1 14	22 32	0 34	8 40	0 34	19 56
W10	22 19	0 14	5 13	18 44	4 38	21 30	1 17	16 15	1 12	5 57	1 15	22 32	0 34	8 40	0 34	19 55
T 11	22 11	4n28	5 8	18 50	4 32	21 39	1 14	16 3	1 12	5 57	1 15	22 31	0 34	8 40	0 34	19 55
F 12	22 3	9 5	4 49	18 58	4 25	21 48	1 12	15 51	1 11	5 58	1 15	22 31	0 34	8 40	0 34	19 55
S 13	21 55	13 26	4 15	19 6	4 16	21 56	1 9	15 39	1 11	5 58	1 16	22 30	0 34	8 41	0 34	19 55
S 14	21 46	17 16	3 28	19 15	4 7	22 3	1 7	15 26	1 11	5 59	1 16	22 30	0 34	8 41	0 34	19 55
M15	21 37	20 21	2 28	19 25	3 57	22 10	1 4	15 14	1 10	6 0	1 16	22 29	0 34	8 41	0 34	19 55
T 16	21 28	22 21	1 17	19 35	3 45	22 16	1 2	15 2	1 10	6 1	1 16	22 29	0 34	8 41	0 34	19 55
W17	21 18	22 59	0 0	19 46	3 34	22 22	0 59	14 49	1 10	6 2	1 17	22 28	0 34	8 42	0 34	19 54
T 18	21 8	22 4	1s19	19 58	3 21	22 27	0 56	14 36	1 9	6 3	1 17	22 28	0 34	8 42	0 34	19 54
F 19	20 57	19 34	2 35	20 9	3 8	22 31	0 54	14 24	1 9	6 4	1 17	22 27	0 34	8 42	0 34	19 54
S 20	20 47	15 41	3 40	20 21	2 54	22 35	0 51	14 11	1 9	6 5	1 18	22 27	0 34	8 43	0 34	19 54
S 21	20 35	10 47	4 30	20 32	2 41	22 38	0 48	13 58	1 8	6 6	1 18	22 26	0 33	8 43	0 34	19 54
M22	20 24	5 17	5 0	20 43	2 26	22 41	0 46	13 45	1 8	6 8	1 18	22 25	0 33	8 44	0 34	19 54
T 23	20 12	0s24	5 10	20 53	2 12	22 43	0 43	13 31	1 7	6 9	1 19	22 25	0 33	8 44	0 34	19 54
W24	20 0	5 55	5 0	21 3	1 57	22 44	0 40	13 18	1 7	6 10	1 19	22 24	0 33	8 45	0 34	19 54
T 25	19 47	10 58	4 32	21 12	1 43	22 44	0 37	13 5	1 7	6 12	1 19	22 24	0 33	8 45	0 34	19 54
F 26	19 34	15 18	3 50	21 20	1 28	22 44	0 35	12 51	1 6	6 14	1 19	22 23	0 33	8 45	0 34	19 54
S 27	19 21	18 46	2 57	21 27	1 14	22 44	0 32	12 38	1 6	6 15	1 20	22 23	0 33	8 46	0 34	19 54
S 28	19 7	21 15	1 57	21 32	0 59	22 42	0 29	12 24	1 6	6 17	1 20	22 22	0 33	8 46	0 34	19 53
M29	18 54	22 38	0 53	21 36	0 45	22 40	0 26	12 11	1 5	6 19	1 20	22 21	0 33	8 47	0 34	19 53
T 30	18 39	22 55	0n13	21 38	0 31	22 38	0 24	11 57	1 5	6 21	1 20	22 21	0 33	8 48	0 33	19 53
W31	18n25	22s 8	1n17	21n38	0s18	22n34	0s21	11n43	1n 5	6s23	1s21	22n20	0s33	8s48	0n33	19s53

Julian Day Number = 2442229.5, Delta T = 44.99 sec  
 Ecliptic obliquity = 23°26'31", Nutation = 0°00'17", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 24°23'03", Lahiri = 23°30'03"



## ASTRODIENST EPHEMERIS for the year 1974

geocentric

AUGUST 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 36 53	8♂22°53	14♂48	21♂53	13♂1	2♂46	16♂R55	12♂20	24♂3	6♂R56	4♂40	18♂R30	16♂42	8♂55	24♂R30	T 1
F 2	20 40 50	9°20'16	26°40	23°36	14°14	3°24	16♂51	12°28	24°5	6♂55	4°41	18♂25	16°39	9°2	24♂Y30	F 2
S 3	20 44 46	10°17'40	8♂30	25°22	15°26	4°1	16°46	12°35	24°6	6°55	4°43	18°17	16°36	9°9	24°29	S 3
S 4	20 48 43	11°15'05	20°22	27°12	16°39	4°39	16°41	12°42	24°8	6°54	4°44	18°8	16°32	9°15	24°29	S 4
M 5	20 52 40	12°12'31	2♂16	29°4	17°52	5°17	16°36	12°49	24°9	6°54	4°46	17°58	16°29	9°22	24°29	M 5
T 6	20 56 36	13°9'57	14°15	0♂59	19°4	5°54	16°30	12°56	24°11	6°54	4°48	17°48	16°26	9°29	24°28	T 6
W 7	21 0 33	14°7'25	26°20	2°57	20°17	6°32	16°25	13°3	24°13	6°53	4°49	17°39	16°23	9°35	24°28	W 7
T 8	21 4 29	15°4'54	8♂33	4°56	21°30	7°10	16°19	13°10	24°15	6°53	4°51	17°31	16°20	9°42	24°27	T 8
F 9	21 8 26	16°2'25	20°57	6°56	22°43	7°48	16°14	13°17	24°17	6°52	4°52	17°26	16°17	9°49	24°27	F 9
S 10	21 12 22	16°59'56	3♂36	8°58	23°56	8°26	16°8	13°24	24°19	6°52	4°54	17°23	16°13	9°55	24°26	S 10
S 11	21 16 19	17°57'29	16°33	11°1	25°8	9°3	16°2	13°31	24°21	6°52	4°56	17°D22	16°10	10°2	24°25	S 11
M12	21 20 15	18°55'04	29°52	13°4	26°21	9°41	15°56	13°38	24°23	6°52	4°58	17°22	16°7	10°9	24°25	M12
T 13	21 24 12	19°52'40	13♂34	15°7	27°34	10°19	15°49	13°45	24°25	6°51	4°59	17°R23	16°4	10°16	24°24	T 13
W14	21 28 9	20°50'17	27°43	17°10	28°48	10°57	15°43	13°52	24°27	6°51	5°1	17°23	16°1	10°22	24°23	W14
T 15	21 32 5	21°47'57	12♂17	19°13	0♂1	11°35	15°36	13°59	24°29	6°51	5°3	17°20	15°57	10°29	24°22	T 15
F 16	21 36 2	22°45'37	27°12	21°15	1°14	12°13	15°30	14°5	24°31	6°51	5°5	17°16	15°54	10°36	24°21	F 16
S 17	21 39 58	23°43'19	12♂23	23°17	2°27	12°51	15°23	14°12	24°34	6°51	5°7	17°9	15°51	10°42	24°20	S 17
S 18	21 43 55	24°41'02	27°39	25°17	3°40	13°29	15°16	14°19	24°36	6°51	5°8	17°0	15°48	10°49	24°19	S 18
M19	21 47 51	25°38'46	12♂49	27°17	4°54	14°7	15°9	14°25	24°38	6°D51	5°10	16°50	15°45	10°56	24°18	M19
T 20	21 51 48	26°36'32	27°43	29°16	6°7	14°45	15°2	14°32	24°41	6°51	5°12	16°40	15°42	11°2	24°17	T 20
W21	21 55 44	27°34'19	12♂12	1♂13	7°20	15°23	14°55	14°38	24°43	6°51	5°14	16°32	15°38	11°9	24°16	W21
T 22	21 59 41	28°32'07	26°13	3°9	8°34	16°2	14°48	14°45	24°45	6°51	5°16	16°26	15°35	11°16	24°14	T 22
F 23	22 3 38	29°29'56	9♂45	5°4	9°47	16°40	14°40	14°51	24°48	6°51	5°18	16°22	15°32	11°23	24°13	F 23
S 24	22 7 34	0♂27'46	22°48	6°58	11°1	17°18	14°33	14°57	24°50	6°51	5°20	16°21	15°29	11°29	24°12	S 24
S 25	22 11 31	1°25'38	5♂27	8°50	12°14	17°56	14°25	15°3	24°53	6°51	5°22	16°D21	15°26	11°36	24°10	S 25
M26	22 15 27	2°23'31	17°47	10°41	13°28	18°34	14°18	15°10	24°56	6°52	5°24	16°R21	15°22	11°43	24°9	M26
T 27	22 19 24	3°21'25	29°53	12°31	14°41	19°13	14°10	15°16	24°58	6°52	5°26	16°20	15°19	11°49	24°8	T 27
W28	22 23 20	4°19'20	11♂48	14°19	15°55	19°51	14°2	15°22	25°1	6°52	5°28	16°18	15°16	11°56	24°6	W28
T 29	22 27 17	5°17'17	23°39	16°6	17°9	20°29	13°55	15°28	25°4	6°52	5°30	16°13	15°13	12°3	24°5	T 29
F 30	22 31 13	6°15'15	5♂29	17°52	18°22	21°8	13°47	15°34	25°7	6°53	5°32	16°5	15°10	12°9	24°3	F 30
S 31	22 35 10	7♂13'14	17♂20	19♂36	19♂36	21♂46	13♂39	15♂39	25♂9	6♂53	5♂34	15♂54	15♂7	12♂16	24♂Y1	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	18n10	20s21	2n17	21n35	0s5	22n30	0s18	11n29	1n4	6s25	1s21	22n20	0s33	8s49	0n33	19s53
F 2	17 55	17 43	3 10	21 31	0n 8	22 26	0 15	11 15	1 4	6 27	1 21	22 19	0 33	8 49	0 33	19 53
S 3	17 40	14 21	3 55	21 23	0 20	22 21	0 12	11 1	1 4	6 29	1 22	22 18	0 33	8 50	0 33	19 53
S 4	17 24	10 25	4 30	21 14	0 31	22 15	0 10	10 47	1 3	6 31	1 22	22 18	0 33	8 51	0 33	19 53
M 5	17 8	6 6	4 54	21 2	0 42	22 8	0 7	10 33	1 3	6 33	1 22	22 17	0 33	8 51	0 33	19 53
T 6	16 52	1 31	5 4	20 47	0 52	22 1	0 4	10 19	1 3	6 35	1 22	22 16	0 32	8 52	0 33	19 53
W 7	16 36	3n 9	5 2	20 29	1 1	21 53	0 1	10 5	1 2	6 38	1 22	22 16	0 32	8 53	0 33	19 53
T 8	16 19	7 45	4 45	20 9	1 9	21 45	0n 1	9 50	1 2	6 40	1 23	22 15	0 32	8 53	0 33	19 53
F 9	16 2	12 7	4 15	19 46	1 16	21 36	0 4	9 36	1 1	6 42	1 23	22 15	0 32	8 54	0 33	19 53
S 10	15 45	16 2	3 32	19 21	1 23	21 26	0 7	9 21	1 1	6 45	1 23	22 14	0 32	8 55	0 33	19 53
S 11	15 27	19 18	2 37	18 53	1 29	21 16	0 9	9 7	1 1	6 48	1 23	22 13	0 32	8 56	0 33	19 53
M12	15 9	21 37	1 32	18 23	1 33	21 5	0 12	8 52	1 0	6 50	1 24	22 13	0 32	8 56	0 33	19 53
T 13	14 51	22 46	0 20	17 51	1 37	20 53	0 15	8 37	1 0	6 53	1 24	22 12	0 32	8 57	0 33	19 53
W14	14 33	22 30	0s55	17 17	1 41	20 41	0 17	8 23	1 0	6 55	1 24	22 11	0 32	8 58	0 33	19 53
T 15	14 15	20 44	2 9	16 42	1 43	20 28	0 20	8 8	0 59	6 58	1 24	22 11	0 32	8 59	0 33	19 53
F 16	13 56	17 32	3 15	16 4	1 45	20 15	0 22	7 53	0 59	7 1	1 24	22 10	0 32	9 0	0 33	19 53
S 17	13 37	13 6	4 9	15 25	1 46	20 1	0 25	7 38	0 58	7 4	1 25	22 9	0 32	9 0	0 33	19 53
S 18	13 18	7 49	4 46	14 45	1 46	19 47	0 27	7 23	0 58	7 7	1 25	22 9	0 32	9 1	0 33	19 53
M19	12 58	2 6	5 2	14 4	1 45	19 31	0 30	7 8	0 58	7 9	1 25	22 8	0 32	9 2	0 33	19 53
T 20	12 39	3s38	4 57	13 22	1 44	19 16	0 32	6 53	0 57	7 12	1 25	22 7	0 32	9 3	0 33	19 53
W21	12 19	9 1	4 33	12 38	1 42	19 0	0 34	6 38	0 57	7 15	1 25	22 7	0 32	9 4	0 33	19 54
T 22	11 59	13 45	3 53	11 54	1 40	18 43	0 37	6 23	0 56	7 18	1 26	22 6	0 32	9 5	0 33	19 54
F 23	11 39	17 36	3 1	11 10	1 37	18 26	0 39	6 8	0 56	7 21	1 26	22 6	0 32	9 6	0 33	19 54
S 24	11 19	20 26	2 2	10 25	1 34	18 8	0 41	5 52	0 56	7 24	1 26	22 5	0 31	9 7	0 33	19 54
S 25	10 58	22 10	0 58	9 39	1 30	17 50	0 44	5 37	0 55	7 27	1 26	22 4	0 31	9 8	0 33	19 54
M26	10 37	22 45	0n 8	8 53	1 26	17 31	0 46	5 22	0 55	7 30	1 26	22 4	0 31	9 9	0 33	19 54
T 27	10 17	22 15	1 11	8 7	1 22	17 11	0 48	5 6	0 54	7 33	1 26	22 3	0 31	9 10	0 33	19 54
W28	9 56	20 45	2 11	7 21	1 17	16 52	0 50	4 51	0 54	7 37	1 26	22 2	0 31	9 11	0 33	19 54
T 29	9 34	18 21	3 4	6 35	1 12	16 31	0 52	4 35	0 54	7 40	1 27	22 2	0 31	9 12	0 32	19 54
F 30	9 13	15 12	3 49	5 49	1 6	16 11	0 54	4 20	0 53	7 43	1 27	22 1	0 31	9 13	0 32	19 54
S 31	8n52	11s27	4n24	5n 2	1n 0	15n49	0n56	4n 4	0n53	7s46	1s27	22n 0	0s31	9s14	0n32	19s54

Julian Day Number = 2442260.5, Delta T = 45.07 sec

Ecliptic obliquity = 23°26'31", Nutation = 0°00'18", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 24°23'07", Lahiri = 23°30'07"

# ASTRODIENST EPHEMERIS for the year 1974

## geocentric

SEPTEMBER 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 39 7	8♏11'15	29♋16	21♏19	20♌50	22♏25	13°R31	15♊45	25♎12	6♋53	5♎36	15°R42	15♋3	12♋23	24°R 0	S 1
M 2	22 43 3	9° 9'18	11♋16	23° 1	22° 4	23° 3	13♋23	15°51	25°15	6°54	5°38	15♋28	15° 0	12°30	23°Y58	M 2
T 3	22 47 0	10° 7'22	23°24	24°42	23°18	23°41	13°15	15°57	25°18	6°54	5°40	15°14	14°57	12°36	23°56	T 3
W 4	22 50 56	11° 5'28	5Y39	26°21	24°32	24°20	13° 7	16° 2	25°21	6°55	5°43	15° 2	14°54	12°43	23°54	W 4
T 5	22 54 53	12° 3'36	18° 3	28° 0	25°46	24°58	13° 0	16° 8	25°24	6°55	5°45	14°51	14°51	12°50	23°52	T 5
F 6	22 58 49	13° 1'45	0♋37	29°37	27° 0	25°37	12°52	16°13	25°27	6°56	5°47	14°44	14°48	12°56	23°51	F 6
S 7	23 2 46	13°59'57	13°23	1♎13	28°14	26°16	12°44	16°19	25°30	6°57	5°49	14°39	14°44	13° 3	23°49	S 7
S 8	23 6 42	14°58'11	26°23	2°47	29°28	26°54	12°36	16°24	25°33	6°57	5°51	14°36	14°41	13°10	23°47	S 8
M 9	23 10 39	15°56'26	9♏40	4°21	0♏42	27°33	12°28	16°29	25°36	6°58	5°53	14°36	14°38	13°16	23°45	M 9
T 10	23 14 36	16°54'44	23°16	5°53	1°56	28°12	12°20	16°34	25°39	6°59	5°56	14°36	14°35	13°23	23°43	T 10
W11	23 18 32	17°53'04	7♎13	7°24	3°10	28°50	12°12	16°39	25°42	6°59	5°58	14°35	14°32	13°30	23°41	W11
T 12	23 22 29	18°51'26	21°33	8°54	4°24	29°29	12° 4	16°44	25°45	7° 0	6° 0	14°32	14°28	13°37	23°38	T 12
F 13	23 26 25	19°49'50	6♏12	10°23	5°39	0♎8	11°56	16°49	25°49	7° 1	6° 2	14°27	14°25	13°43	23°36	F 13
S 14	23 30 22	20°48'17	21° 7	11°51	6°53	0°47	11°49	16°54	25°52	7° 2	6° 4	14°19	14°22	13°50	23°34	S 14
S 15	23 34 18	21°46'45	6♏9	13°17	8° 7	1°26	11°41	16°59	25°55	7° 2	6° 7	14° 9	14°19	13°57	23°32	S 15
M16	23 38 15	22°45'15	21° 9	14°43	9°22	2° 4	11°33	17° 3	25°58	7° 3	6° 9	13°58	14°16	14° 3	23°30	M16
T 17	23 42 11	23°43'47	5♎58	16° 7	10°36	2°43	11°25	17° 8	26° 2	7° 4	6°11	13°47	14°13	14°10	23°27	T 17
W18	23 46 8	24°42'20	20°27	17°29	11°50	3°22	11°18	17°13	26° 5	7° 5	6°14	13°37	14° 9	14°17	23°25	W18
T 19	23 50 4	25°40'56	4♏30	18°51	13° 5	4° 1	11°10	17°17	26° 9	7° 6	6°16	13°30	14° 6	14°23	23°23	T 19
F 20	23 54 1	26°39'33	18° 5	20°11	14°19	4°40	11° 3	17°21	26°12	7° 7	6°18	13°25	14° 3	14°30	23°20	F 20
S 21	23 57 58	27°38'12	1♋12	21°30	15°34	5°19	10°56	17°26	26°15	7° 8	6°20	13°23	14° 0	14°37	23°18	S 21
S 22	0 1 54	28°36'53	13°54	22°48	16°48	5°58	10°49	17°30	26°19	7° 9	6°23	13°D23	13°57	14°44	23°15	S 22
M23	0 5 51	29°35'36	26°16	24° 4	18° 3	6°37	10°41	17°34	26°22	7°10	6°25	13°R23	13°54	14°50	23°13	M23
T 24	0 9 47	0♎34'20	8♎22	25°18	19°17	7°17	10°34	17°38	26°26	7°12	6°27	13°23	13°50	14°57	23°11	T 24
W25	0 13 44	1°33'06	20°18	26°31	20°32	7°56	10°27	17°42	26°29	7°13	6°30	13°21	13°47	15° 4	23° 8	W25
T 26	0 17 40	2°31'53	2♋9	27°42	21°47	8°35	10°21	17°45	26°33	7°14	6°32	13°17	13°44	15°10	23° 6	T 26
F 27	0 21 37	3°30'43	14° 0	28°52	23° 1	9°14	10°14	17°49	26°36	7°15	6°34	13°11	13°41	15°17	23° 3	F 27
S 28	0 25 33	4°29'34	25°53	29°59	24°16	9°53	10° 7	17°53	26°40	7°16	6°37	13° 2	13°38	15°24	23° 0	S 28
S 29	0 29 30	5°28'27	7♋54	1♏4	25°31	10°33	10° 1	17°56	26°43	7°18	6°39	12°51	13°34	15°30	22°58	S 29
M30	0 33 27	6♎27'21	20♋3	2♏8	26°45	11♎12	9♋55	18♎0	26♎47	7♋19	6♎41	12♋39	13♋31	15♋37	22°Y55	M30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	8n30	7s14	4n48	4n16	0n54	15n28	0n58	3n49	0n52	7s49	1s27	22n 0	0s31	9s15	0n32	19s55	1n34	12n40	16n14	22s40	22s36	12s56	10n10	0n55			
M 2	8 8	2 44	4 59	3 30	0 48	15 6	1 0	3 33	0 52	7 52	1 27	21 59	0 31	9 16	0 32	19 55	1 34	12 39	16 14	22 39	22 36	12 53	10 9	0 55			
T 3	7 46	1n55	4 57	2 44	0 41	14 43	1 1	3 18	0 52	7 55	1 27	21 59	0 31	9 17	0 32	19 55	1 34	12 38	16 14	22 37	22 36	12 51	10 9	0 55			
W 4	7 24	6 33	4 41	1 58	0 34	14 20	1 3	3 2	0 51	7 58	1 27	21 58	0 31	9 18	0 32	19 55	1 34	12 37	16 14	22 36	22 35	12 49	10 8	0 55			
T 5	7 2	10 57	4 12	1 13	0 27	13 57	1 5	2 46	0 51	8 1	1 27	21 57	0 31	9 19	0 32	19 55	1 34	12 36	16 13	22 35	22 35	12 46	10 7	0 55			
F 6	6 40	14 58	3 30	0 28	0 20	13 33	1 6	2 31	0 50	8 5	1 27	21 57	0 31	9 20	0 32	19 55	1 34	12 35	16 13	22 34	22 34	12 44	10 6	0 55			
S 7	6 18	18 21	2 37	0s17	0 13	13 9	1 8	2 15	0 50	8 8	1 27	21 56	0 31	9 22	0 32	19 55	1 34	12 34	16 13	22 33	22 34	12 42	10 6	0 55			
S 8	5 55	20 53	1 35	1 2	0 5	12 45	1 9	1 59	0 49	8 11	1 27	21 56	0 31	9 23	0 32	19 56	1 34	12 33	16 13	22 33	22 34	12 39	10 5	0 55			
M 9	5 33	22 20	0 26	1 46	0s 2	12 20	1 11	1 44	0 49	8 14	1 27	21 55	0 31	9 24	0 32	19 56	1 34	12 32	16 13	22 33	22 33	12 37	10 4	0 55			
T 10	5 10	22 31	0s46	2 29	0 10	11 55	1 12	1 28	0 49	8 17	1 27	21 54	0 31	9 25	0 32	19 56	1 34	12 31	16 13	22 33	22 33	12 35	10 3	0 55			
W11	4 47	21 18	1 57	3 13	0 18	11 29	1 14	1 12	0 48	8 20	1 27	21 54	0 31	9 26	0 32	19 56	1 34	12 30	16 13	22 33	22 33	12 32	10 3	0 55			
T 12	4 25	18 43	3 2	3 55	0 26	11 3	1 15	0 56	0 48	8 23	1 28	21 53	0 31	9 27	0 32	19 56	1 34	12 29	16 12	22 33	22 32	12 30	10 2	0 55			
F 13	4 2	14 54	3 57	4 38	0 34	10 37	1 16	0 40	0 47	8 26	1 28	21 53	0 31	9 29	0 32	19 57	1 34	12 28	16 12	22 32	22 32	12 28	10 1	0 55			
S 14	3 39	10 5	4 37	5 19	0 41	10 11	1 17	0 24	0 47	8 29	1 28	21 52	0 31	9 30	0 32	19 57	1 34	12 27	16 12	22 31	22 32	12 26	10 0	0 55			
S 15	3 16	4 39	4 58	6 0	0 49	9 44	1 18	0 9	0 46	8 32	1 28	21 52	0 30	9 31	0 32	19 57	1 34	12 26	16 12	22 30	22 31	12 23	9 59	0 55			
M16	2 53	1s 4	4 58	6 41	0 57	9 17	1 19	0s 7	0 46	8 35	1 28	21 51	0 30	9 32	0 32	19 57	1 34	12 25	16 12	22 29	22 31	12 21	9 58	0 55			
T 17	2 29	6 38	4 39	7 21	1 5	8 50	1 20	0 23	0 46	8 38	1 28	21 50	0 30	9 33	0 32	19 57	1 34	12 24	16 12	22 27	22 30	12 19	9 57	0 55			
W18	2 6	11 43	4 1	8 0	1 13	8 22	1 21	0 39	0 45	8 41	1 28	21 50	0 30	9 35	0 32	19 57	1 34	12 23	16 12	22 26	22 30	12 16	9 56	0 55			
T 19	1 43	16 0	3 10	8 38	1 21	7 55	1 22	0 55	0 45	8 43	1 28	21 49	0 30	9 36	0 32	19 58	1 33	12 22	16 12	22 25	22 30	12 14	9 56	0 54			
F 20	1 20	19 18	2 10	9 16	1 29	7 27	1 23	1 11	0 44	8 46	1 28	21 49	0 30	9 37	0 32	19 58	1 33	12 21	16 12	22 25	22 29	12 12	9 55	0 54			
S 21	0 56	21 27	1 4	9 53	1 37	6 58	1 23	1 27	0 44	8 49	1 27	21 48	0 30	9 38	0 32	19 58	1 33	12 20	16 12	22 25	22 29	12 9	9 54	0 54			
S 22	0 33	22 26	0n 3	10 29	1 45	6 30	1 24	1 42	0 43	8 52	1 27	21 48	0 30	9 40	0 32	19 58	1 33	12 19	16 12	22 24	22 29	12 7	9 53	0 54			
M23	0 10	22 15	1 8	11 4	1 52	6 1	1 25	1 58	0 43	8 54	1 27	21 47	0 30	9 41	0 32	19 59	1 33	12 18	16 12	22 24	22 28	12 5	9 52	0 54			
T 24	0s14	21 2	2 9	11 39	2 0	5 33	1 25	2 14	0 43	8 57	1 27	21 47	0 30	9 42	0 32	19 59	1 33	12 18	16 12	22 24	22 28	12 2	9 51	0 54			
W25	0 37	18 54	3 3	12 12	2 7	5 4	1 26	2 30	0 42	9 0	1 27	21 47	0 30	9 43	0 32	19 59	1 33	12 17	16 12	22 24	22 27	12 0	9 50	0 54			
T 26	1 0	15 58	3 49	12 45	2 14	4 35	1 26	2 46	0 42	9 2	1 27	21 46	0 30	9 45	0 32	19 59	1 33	12 16	16 12	22 24	22 27	11 58	9 49	0 54			
F 27	1 24	12 24	4 24	13 16	2 21	4 5	1 26	3 2	0 41	9 5	1 27	21 46	0 30	9 46	0 32	20 0	1 33	12 15	16 12	22 23	22 27	11 55	9 48	0 54			
S 28	1 47	8 21	4 49	13 47	2 28	3 36	1 26	3 18	0 41	9 7	1 27	21 45	0 30	9 47	0 32	20 0	1 33	12 14	16 12	22 22	22 26	11 53	9 47	0 54			
S 29	2 10	3 57	5 1	14 16	2 35	3 7	1 27	3 34	0 40	9 9	1 27	21 45	0 30	9 49	0 32	20 0	1 33	12 13	16 12	22 20	22 26	11 51	9 46	0 54			
M30	2s34	0n39	5n 0	14s44	2s41	2n37	1n27	3s49	0n40	9s12	1s27	21n44	0s30	9s50	0n32	20s 0	1n33	12n12	16n12	22s19	22s26	11s48	9n45	0n54			

# ASTRODIENST EPHEMERIS for the year 1974

## geocentric

OCTOBER 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 37 23	7 <sup>h</sup> 26'18"	2 <sup>h</sup> 22'	3 <sup>h</sup> 18'	28 <sup>h</sup> 0'	11 <sup>h</sup> 51'	9 <sup>h</sup> R48	18 <sup>h</sup> 3	26 <sup>h</sup> 51'	7 <sup>h</sup> 20'	6 <sup>h</sup> 43'	12 <sup>h</sup> R26	13 <sup>h</sup> 28'	15 <sup>h</sup> 44'	22 <sup>h</sup> R53	T 1
W 2	0 41 20	8 <sup>h</sup> 25'17"	14 <sup>h</sup> 51'	4 <sup>h</sup> 7'	29 <sup>h</sup> 15'	12 <sup>h</sup> 31'	9 <sup>h</sup> K42	18 <sup>h</sup> 6'	26 <sup>h</sup> 54'	7 <sup>h</sup> 22'	6 <sup>h</sup> 46'	12 <sup>h</sup> 15'	13 <sup>h</sup> 25'	15 <sup>h</sup> 51'	22 <sup>h</sup> Y50	W 2
T 3	0 45 16	9 <sup>h</sup> 24'17"	27 <sup>h</sup> 31'	5 <sup>h</sup> 2'	0 <sup>h</sup> 30'	13 <sup>h</sup> 10'	9 <sup>h</sup> 36'	18 <sup>h</sup> 9'	26 <sup>h</sup> 58'	7 <sup>h</sup> 23'	6 <sup>h</sup> 48'	12 <sup>h</sup> 6'	13 <sup>h</sup> 22'	15 <sup>h</sup> 57'	22 <sup>h</sup> 47'	T 3
F 4	0 49 13	10 <sup>h</sup> 23'20"	10 <sup>h</sup> 22'	5 <sup>h</sup> 54'	1 <sup>h</sup> 45'	13 <sup>h</sup> 50'	9 <sup>h</sup> 31'	18 <sup>h</sup> 12'	27 <sup>h</sup> 1'	7 <sup>h</sup> 24'	6 <sup>h</sup> 50'	11 <sup>h</sup> 59'	13 <sup>h</sup> 19'	16 <sup>h</sup> 4'	22 <sup>h</sup> 45'	F 4
S 5	0 53 9	11 <sup>h</sup> 22'25"	23 <sup>h</sup> 24'	6 <sup>h</sup> 43'	2 <sup>h</sup> 59'	14 <sup>h</sup> 29'	9 <sup>h</sup> 25'	18 <sup>h</sup> 15'	27 <sup>h</sup> 5'	7 <sup>h</sup> 26'	6 <sup>h</sup> 53'	11 <sup>h</sup> 55'	13 <sup>h</sup> 15'	16 <sup>h</sup> 11'	22 <sup>h</sup> 42'	S 5
S 6	0 57 6	12 <sup>h</sup> 21'33"	6 <sup>h</sup> 38'	7 <sup>h</sup> 29'	4 <sup>h</sup> 14'	15 <sup>h</sup> 9'	9 <sup>h</sup> 19'	18 <sup>h</sup> 18'	27 <sup>h</sup> 9'	7 <sup>h</sup> 27'	6 <sup>h</sup> 55'	11 <sup>h</sup> D54	13 <sup>h</sup> 12'	16 <sup>h</sup> 17'	22 <sup>h</sup> 39'	S 6
M 7	1 1 2	13 <sup>h</sup> 20'42"	20 <sup>h</sup> 4'	8 <sup>h</sup> 10'	5 <sup>h</sup> 29'	15 <sup>h</sup> 48'	9 <sup>h</sup> 14'	18 <sup>h</sup> 21'	27 <sup>h</sup> 12'	7 <sup>h</sup> 29'	6 <sup>h</sup> 57'	11 <sup>h</sup> 54'	13 <sup>h</sup> 9'	16 <sup>h</sup> 24'	22 <sup>h</sup> 37'	M 7
T 8	1 4 59	14 <sup>h</sup> 19'55"	3 <sup>h</sup> 34'	8 <sup>h</sup> 48'	6 <sup>h</sup> 44'	16 <sup>h</sup> 28'	9 <sup>h</sup> 9'	18 <sup>h</sup> 24'	27 <sup>h</sup> 16'	7 <sup>h</sup> 30'	7 <sup>h</sup> 0'	11 <sup>h</sup> 54'	13 <sup>h</sup> 6'	16 <sup>h</sup> 31'	22 <sup>h</sup> 34'	T 8
W 9	1 8 56	15 <sup>h</sup> 19'09"	17 <sup>h</sup> 37'	9 <sup>h</sup> 20'	7 <sup>h</sup> 59'	17 <sup>h</sup> 8'	9 <sup>h</sup> 4'	18 <sup>h</sup> 26'	27 <sup>h</sup> 20'	7 <sup>h</sup> 32'	7 <sup>h</sup> 2'	11 <sup>h</sup> R55	13 <sup>h</sup> 3'	16 <sup>h</sup> 38'	22 <sup>h</sup> 31'	W 9
T 10	1 12 52	16 <sup>h</sup> 18'26"	1 <sup>h</sup> 45'	9 <sup>h</sup> 48'	9 <sup>h</sup> 14'	17 <sup>h</sup> 47'	8 <sup>h</sup> 59'	18 <sup>h</sup> 29'	27 <sup>h</sup> 24'	7 <sup>h</sup> 33'	7 <sup>h</sup> 4'	11 <sup>h</sup> 54'	12 <sup>h</sup> 59'	16 <sup>h</sup> 44'	22 <sup>h</sup> 28'	T 10
F 11	1 16 49	17 <sup>h</sup> 17'45"	16 <sup>h</sup> 7'	10 <sup>h</sup> 10'	10 <sup>h</sup> 29'	18 <sup>h</sup> 27'	8 <sup>h</sup> 55'	18 <sup>h</sup> 31'	27 <sup>h</sup> 27'	7 <sup>h</sup> 35'	7 <sup>h</sup> 6'	11 <sup>h</sup> 50'	12 <sup>h</sup> 56'	16 <sup>h</sup> 51'	22 <sup>h</sup> 26'	F 11
S 12	1 20 45	18 <sup>h</sup> 17'06"	0 <sup>h</sup> 39'	10 <sup>h</sup> 26'	11 <sup>h</sup> 44'	19 <sup>h</sup> 7'	8 <sup>h</sup> 50'	18 <sup>h</sup> 33'	27 <sup>h</sup> 31'	7 <sup>h</sup> 36'	7 <sup>h</sup> 9'	11 <sup>h</sup> 45'	12 <sup>h</sup> 53'	16 <sup>h</sup> 58'	22 <sup>h</sup> 23'	S 12
S 13	1 24 42	19 <sup>h</sup> 16'29"	15 <sup>h</sup> 17'	10 <sup>h</sup> 35'	12 <sup>h</sup> 59'	19 <sup>h</sup> 47'	8 <sup>h</sup> 46'	18 <sup>h</sup> 35'	27 <sup>h</sup> 35'	7 <sup>h</sup> 38'	7 <sup>h</sup> 11'	11 <sup>h</sup> 38'	12 <sup>h</sup> 50'	17 <sup>h</sup> 4'	22 <sup>h</sup> 20'	S 13
M14	1 28 38	20 <sup>h</sup> 15'55"	29 <sup>h</sup> 54'	10 <sup>h</sup> R38	14 <sup>h</sup> 14'	20 <sup>h</sup> 26'	8 <sup>h</sup> 42'	18 <sup>h</sup> 37'	27 <sup>h</sup> 39'	7 <sup>h</sup> 40'	7 <sup>h</sup> 13'	11 <sup>h</sup> 30'	12 <sup>h</sup> 47'	17 <sup>h</sup> 11'	22 <sup>h</sup> 17'	M14
T 15	1 32 35	21 <sup>h</sup> 15'23"	14 <sup>h</sup> 22'	10 <sup>h</sup> 33'	15 <sup>h</sup> 29'	21 <sup>h</sup> 6'	8 <sup>h</sup> 38'	18 <sup>h</sup> 39'	27 <sup>h</sup> 42'	7 <sup>h</sup> 41'	7 <sup>h</sup> 16'	11 <sup>h</sup> 21'	12 <sup>h</sup> 44'	17 <sup>h</sup> 18'	22 <sup>h</sup> 15'	T 15
W16	1 36 31	22 <sup>h</sup> 14'53"	28 <sup>h</sup> 36'	10 <sup>h</sup> 19'	16 <sup>h</sup> 44'	21 <sup>h</sup> 46'	8 <sup>h</sup> 34'	18 <sup>h</sup> 41'	27 <sup>h</sup> 46'	7 <sup>h</sup> 43'	7 <sup>h</sup> 18'	11 <sup>h</sup> 14'	12 <sup>h</sup> 40'	17 <sup>h</sup> 25'	22 <sup>h</sup> 12'	W16
T 17	1 40 28	23 <sup>h</sup> 14'25"	12 <sup>h</sup> 30'	9 <sup>h</sup> 58'	17 <sup>h</sup> 59'	22 <sup>h</sup> 26'	8 <sup>h</sup> 30'	18 <sup>h</sup> 43'	27 <sup>h</sup> 50'	7 <sup>h</sup> 45'	7 <sup>h</sup> 20'	11 <sup>h</sup> 9'	12 <sup>h</sup> 37'	17 <sup>h</sup> 31'	22 <sup>h</sup> 9'	T 17
F 18	1 44 24	24 <sup>h</sup> 13'59"	26 <sup>h</sup> 0'	9 <sup>h</sup> 28'	19 <sup>h</sup> 14'	23 <sup>h</sup> 6'	8 <sup>h</sup> 27'	18 <sup>h</sup> 44'	27 <sup>h</sup> 54'	7 <sup>h</sup> 47'	7 <sup>h</sup> 22'	11 <sup>h</sup> 6'	12 <sup>h</sup> 34'	17 <sup>h</sup> 38'	22 <sup>h</sup> 6'	F 18
S 19	1 48 21	25 <sup>h</sup> 13'35"	9 <sup>h</sup> 7'	8 <sup>h</sup> 49'	20 <sup>h</sup> 29'	23 <sup>h</sup> 46'	8 <sup>h</sup> 24'	18 <sup>h</sup> 46'	27 <sup>h</sup> 57'	7 <sup>h</sup> 48'	7 <sup>h</sup> 25'	11 <sup>h</sup> D 4	12 <sup>h</sup> 31'	17 <sup>h</sup> 45'	22 <sup>h</sup> 4'	S 19
S 20	1 52 18	26 <sup>h</sup> 13'12"	21 <sup>h</sup> 50'	8 <sup>h</sup> 2'	21 <sup>h</sup> 45'	24 <sup>h</sup> 26'	8 <sup>h</sup> 21'	18 <sup>h</sup> 47'	28 <sup>h</sup> 1'	7 <sup>h</sup> 50'	7 <sup>h</sup> 27'	11 <sup>h</sup> 5'	12 <sup>h</sup> 28'	17 <sup>h</sup> 51'	22 <sup>h</sup> 1'	S 20
M21	1 56 14	27 <sup>h</sup> 12'52"	4 <sup>h</sup> 14'	7 <sup>h</sup> 7'	23 <sup>h</sup> 0'	25 <sup>h</sup> 6'	8 <sup>h</sup> 18'	18 <sup>h</sup> 48'	28 <sup>h</sup> 5'	7 <sup>h</sup> 52'	7 <sup>h</sup> 29'	11 <sup>h</sup> 6'	12 <sup>h</sup> 25'	17 <sup>h</sup> 58'	22 <sup>h</sup> 58'	M21
T 22	2 0 11	28 <sup>h</sup> 12'33"	16 <sup>h</sup> 23'	6 <sup>h</sup> 5'	24 <sup>h</sup> 15'	25 <sup>h</sup> 47'	8 <sup>h</sup> 15'	18 <sup>h</sup> 49'	28 <sup>h</sup> 9'	7 <sup>h</sup> 54'	7 <sup>h</sup> 31'	11 <sup>h</sup> 8'	12 <sup>h</sup> 21'	18 <sup>h</sup> 5'	21 <sup>h</sup> 55'	T 22
W23	2 4 7	29 <sup>h</sup> 12'16"	28 <sup>h</sup> 21'	4 <sup>h</sup> 56'	25 <sup>h</sup> 30'	26 <sup>h</sup> 27'	8 <sup>h</sup> 13'	18 <sup>h</sup> 50'	28 <sup>h</sup> 12'	7 <sup>h</sup> 56'	7 <sup>h</sup> 33'	11 <sup>h</sup> R 8	12 <sup>h</sup> 18'	18 <sup>h</sup> 11'	21 <sup>h</sup> 53'	W23
T 24	2 8 4	0 <sup>h</sup> 12'01"	10 <sup>h</sup> 21'	3 <sup>h</sup> 43'	26 <sup>h</sup> 45'	27 <sup>h</sup> 7'	8 <sup>h</sup> 10'	18 <sup>h</sup> 51'	28 <sup>h</sup> 16'	7 <sup>h</sup> 57'	7 <sup>h</sup> 36'	11 <sup>h</sup> 8'	12 <sup>h</sup> 15'	18 <sup>h</sup> 18'	21 <sup>h</sup> 50'	T 24
F 25	2 12 0	1 <sup>h</sup> 11'47"	2 <sup>h</sup> 5'	2 <sup>h</sup> 28'	28 <sup>h</sup> 0'	27 <sup>h</sup> 47'	8 <sup>h</sup> 8'	18 <sup>h</sup> 52'	28 <sup>h</sup> 20'	7 <sup>h</sup> 59'	7 <sup>h</sup> 38'	11 <sup>h</sup> 5'	12 <sup>h</sup> 12'	18 <sup>h</sup> 25'	21 <sup>h</sup> 47'	F 25
S 26	2 15 57	2 <sup>h</sup> 11'35"	4 <sup>h</sup> 1'	1 <sup>h</sup> 12'	29 <sup>h</sup> 16'	28 <sup>h</sup> 27'	8 <sup>h</sup> 7'	18 <sup>h</sup> 53'	28 <sup>h</sup> 24'	8 <sup>h</sup> 1'	7 <sup>h</sup> 40'	11 <sup>h</sup> 1'	12 <sup>h</sup> 9'	18 <sup>h</sup> 32'	21 <sup>h</sup> 44'	S 26
S 27	2 19 53	3 <sup>h</sup> 11'24"	16 <sup>h</sup> 5'	29 <sup>h</sup> 58'	0 <sup>h</sup> 31'	29 <sup>h</sup> 8'	8 <sup>h</sup> 5'	18 <sup>h</sup> 53'	28 <sup>h</sup> 28'	8 <sup>h</sup> 3'	7 <sup>h</sup> 42'	10 <sup>h</sup> 56'	12 <sup>h</sup> 5'	18 <sup>h</sup> 38'	21 <sup>h</sup> 42'	S 27
M28	2 23 50	4 <sup>h</sup> 11'16"	28 <sup>h</sup> 20'	28 <sup>h</sup> 48'	1 <sup>h</sup> 46'	29 <sup>h</sup> 48'	8 <sup>h</sup> 4'	18 <sup>h</sup> 54'	28 <sup>h</sup> 31'	8 <sup>h</sup> 5'	7 <sup>h</sup> 44'	10 <sup>h</sup> 49'	12 <sup>h</sup> 2'	18 <sup>h</sup> 45'	21 <sup>h</sup> 39'	M28
T 29	2 27 47	5 <sup>h</sup> 11'09"	10 <sup>h</sup> Y49	27 <sup>h</sup> 45'	3 <sup>h</sup> 1'	0 <sup>h</sup> 28'	8 <sup>h</sup> 2'	18 <sup>h</sup> 54'	28 <sup>h</sup> 35'	8 <sup>h</sup> 7'	7 <sup>h</sup> 46'	10 <sup>h</sup> 43'	11 <sup>h</sup> 59'	18 <sup>h</sup> 52'	21 <sup>h</sup> 36'	T 29
W30	2 31 43	6 <sup>h</sup> 11'04"	23 <sup>h</sup> 33'	26 <sup>h</sup> 49'	4 <sup>h</sup> 16'	1 <sup>h</sup> 9'	8 <sup>h</sup> 1'	18 <sup>h</sup> 54'	28 <sup>h</sup> 39'	8 <sup>h</sup> 9'	7 <sup>h</sup> 48'	10 <sup>h</sup> 37'	11 <sup>h</sup> 56'	18 <sup>h</sup> 58'	21 <sup>h</sup> 34'	W30
T 31	2 35 40	7 <sup>h</sup> 11'01"	6 <sup>h</sup> 31'	26 <sup>h</sup> 4'	5 <sup>h</sup> 32'	1 <sup>h</sup> 49'	8 <sup>h</sup> 0'	18 <sup>h</sup> 54'	28 <sup>h</sup> 43'	8 <sup>h</sup> 11'	7 <sup>h</sup> 51'	10 <sup>h</sup> 32'	11 <sup>h</sup> 53'	19 <sup>h</sup> 5'	21 <sup>h</sup> Y31	T 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	2s57	5n17	4n44	15s11	2s48	2n 7	1n27	4s 5	0n39	9s14	1s27	21n44	0s30	9s51	0n32	20s 1	1n33	12n11	16n12	22s17	22s25	11s46	9n44	0n54					
W 2	3 20	9 47	4 15	15 37	2 53	1 37	1 27	4 21	0 39	9 16	1 27	21 44	0 30	9 53	0 32	20 1	1 33	12 10	16 12	22 16	22 25	11 44	9 43	0 54					
T 3	3 44	13 55	3 33	16 1	2 59	1 8	1 27	4 37	0 38	9 18	1 27	21 43	0 30	9 54	0 32	20 1	1 33	12 10	16 12	22 15	22 24	11 41	9 42	0 54					
F 4	4 7	17 28	2 40	16 23	3 4	0 38	1 26	4 52	0 38	9 20	1 27	21 43	0 30	9 55	0 32	20 1	1 33	12 9	16 12	22 14	22 24	11 39	9 41	0 54					
S 5	4 30	20 12	1 37	16 44	3 9	0 8	1 26	5 8	0 37	9 22	1 26	21 42	0 30	9 57	0 32	20 2	1 33	12 8	16 12	22 13	22 24	11 37	9 40	0 54					
S 6	4 53	21 53	0 28	17 3	3 13	0s22	1 26	5 24	0 37	9 24	1 26	21 42	0 30	9 58	0 32	20 2	1 33	12 7	16 12	22 13	22 23	11 34	9 39	0 54					
M 7	5 16	22 21	0s44	17 20	3 16	0 52	1 26	5 40	0 36	9 26	1 26	21 42	0 30	9 59	0 32	20 2	1 33	12 6	16 12	22 13	22 23	11 32	9 37	0 53					
T 8	5 39	21 29	1 54	17 35	3 19	1 22	1 25	5 55	0 36	9 28	1 26	21 41	0 30	10 1	0 32	20 3	1 33	12 5	16 12	22 13	22 22	11 30	9 36	0 53					
W 9	6 2	19 19	2 59	17 47	3 22	1 52	1 25	6 11	0 36	9 30	1 26	21 41	0 29	10 2	0 32	20 3	1 32	12 5	16 12	22 13	22 22	11 27	9 35	0 53					
T 10	6 25	15 57	3 55	17 58	3 23	2 22	1 24	6 26	0 35	9 32	1 26	21 41	0 29	10 3	0 32	20 3	1 32	12 4	16 12	22 13	22 22	11 25	9 34	0 53					
F 11	6 48	11 37	4 36	18 5	3 24	2 52	1 23	6 42	0 35	9 33	1 26	21 41	0 29	10 5	0 32	20 3	1 32	12 3	16 12	22 13	22 21	11 23	9 33	0 53					
S 12	7 10	6 33	5 0	18 10	3 24	3 22	1 23	6 58	0 34	9 35	1 25	21 40	0 29	10 6	0 32	20 4	1 32	12 2	16 13	22 12	22 21	11 20	9 32	0 53					
S 13	7 33	1 6	5 5	18 12	3 22	3 52	1 22	7 13	0 34	9 36	1 25	21 40	0 29	10 7	0 32	20 4	1 32	12 2	16 13	22 11	22 20	11 18	9 31	0 53					
M14	7 55	4s24	4 51	18 10	3 20	4 22	1 21	7 29	0 33	9 38	1 25	21 40	0 29	10 9	0 32	20 4	1 32	12 1	16 13	22 10	22 20	11 15	9 30	0 53					
T 15	8 18	9 37	4 17	18 5	3 16	4 52	1 20	7 44	0 33	9 39	1 25	21 40	0 29	10 10	0 32	20 5	1 32	12 0	16 13	22 9	22 20	11 13	9 29	0 53					
W16	8 40	14 13	3 28	17 56	3 11	5 21	1 19	7 59	0 32	9 40	1 25	21 39	0 29	10 11	0 32	20 5	1 32	11 59	16 13	22 8	22 19	11 11	9 28	0 53					
T 17	9 2	17 56	2 28	17 43	3 4	5 51	1 18	8 15	0 32	9 41	1 25	21 39	0 29	10 13	0 32	20 5	1 32	11 59	16 13	22 7	22 19	11 8	9 27	0 53					
F 18	9 24	20 34	1 21	17 25	2 55	6 20	1 17	8 30	0 31	9 43	1 25	21 39	0 29	10 14	0 32	20 6	1 32	11 58	16 13	22 6	22 18	11 6	9 25	0 53					
S 19	9 46	22 0	0 11	17 3	2 45	6 50	1 16	8 45	0 31	9 44	1 24	21 39	0 29	10 15	0 32	20 6	1 32	11 57	16 14	22 6	22 18	11 4	9 24	0 53					
S 20	10 7	22 14	0n58	16 36	2 33	7 19	1 15	9 0	0 30	9 45	1 24	21 39	0 29	10 17	0 32	20 6	1 32	11 57	16 14	22 6	22 18	11 1	9 23	0 52					
M21	10 29	21 20	2 2	16 5	2 19	7 48	1 14	9 16	0 30	9 45	1 24	21 39	0 29	10 18	0 32	20 7	1 32	11 56	16 14	22 7	22 17	10 59	9 22	0 52					
T 22	10 50	19 28	3 0	15 30	2 4	8 17	1 13	9 31	0 29	9 46	1 24	21 39	0 29	10 19	0 32	20 7	1 32	11 55	16 14	22 7	22 17	10 57	9 21	0 52					
W23	11 12	16 46	3 48	14 51	1 47	8 45	1 11	9 46	0 29	9 47	1 24	21 38	0 29	10 21	0 32	20 7	1 32	11 55	16 14	22 7	22 16	10 54	9 20	0 52					
T 24	11 33	13 24	4 27	14 8	1 28	9 14	1 10	10 1	0 28	9 48	1 23	21 38	0 29	10 22	0 32	20 8	1 32	11 54	16 15	22 7	22 16	10 52	9 19	0 52					
F 25	11 53	9 31	4 54	13 24	1 9	9 42	1 8	10 15	0 28	9 48	1 23	21 38	0 29	10 24	0 32	20 8	1 32	11 53	16 15	22 6	22 15	10 49	9 18	0 52					
S 26	12 14	5 15	5 8	12 39	0 48	10 10	1 7	10 30	0 27	9 49	1 23	21 38	0 29	10 25	0 31	20 8	1 32	11 53	16 15	22 6	22 15	10 47	9 17	0 52					
S 27	12 35	0 44	5 9	11 53	0 27	10 38	1 5	10 45	0 27	9 49	1 23	21 38	0 29	10 26	0 31	20 9	1 32	11 52	16 15	22 5	22 15	10 45	9 16	0 52					
M28	12 55	3n52	4 56	11 9	0 7	11 5	1 4	11 0	0 26	9 50	1 23	21 38	0 29	10 28	0 31	20 9	1 32	11 52	16 16	22 4	22 14	10 42	9 14	0 52					
T 29	13 15	8 24	4 29	10 28	0n13	11 33	1 2	11 14	0 26	9 50	1 22	21 38	0 29	10 29	0 31	20 9	1 32	11 51	16 16	22 3	22 14	10 40	9 13	0 52					
W30	13 35	12 40	3 48	9 50	0 32	12 0	1 1	11 29	0 25	9 50	1 22	21 38	0 29	10 30	0 31	20 10	1 32	11 50	16 16	22 2	22 13	10 38	9 12	0 52					
T 31	13s55	16n26	2n55	9s17	0n50	12s26	0n59	11s44	0n24	9s50	1s22	21n38	0s29	10s32	0n31	20s10	1n32	11n50	16n16	22s 2	22s13	10s35	9n11	0n52					

# ASTRODIENST EPHEMERIS for the year 1974

## geocentric

NOVEMBER 1974

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 39 36	8♉10°59	19♌44	25°R29	6♉47	2♉30	8°R 0	18°R54	28♌46	8♌13	7♌53	10°R28	11♌50	19♌12	21°R28	F 1
S 2	2 43 33	9°11'00	3♉10	25♌ 5	8° 2	3°10	7♌59	18♌54	28°50	8°15	7°55	10♌27	11°46	19°19	21°Y26	S 2
S 3	2 47 29	10°11'03	16°47	24°53	9°17	3°51	7°59	18°54	28°54	8°17	7°57	10°D27	11°43	19°25	21°23	S 3
M 4	2 51 26	11°11'08	0♌34	24°D53	10°33	4°32	7°D59	18°54	28°58	8°19	7°59	10°28	11°40	19°32	21°21	M 4
T 5	2 55 22	12°11'15	14°30	25° 4	11°48	5°12	7°59	18°53	29° 1	8°21	8° 1	10°29	11°37	19°39	21°18	T 5
W 6	2 59 19	13°11'24	28°32	25°25	13° 3	5°53	8° 0	18°53	29° 5	8°23	8° 3	10°31	11°34	19°45	21°16	W 6
T 7	3 3 16	14°11'35	12♌40	25°55	14°18	6°34	8° 0	18°52	29° 9	8°25	8° 5	10°R31	11°31	19°52	21°13	T 7
F 8	3 7 12	15°11'48	26°52	26°35	15°34	7°15	8° 1	18°51	29°12	8°27	8° 7	10°31	11°27	19°59	21°11	F 8
S 9	3 11 9	16°12'03	11♉ 5	27°22	16°49	7°55	8° 2	18°51	29°16	8°30	8° 9	10°29	11°24	20° 6	21° 8	S 9
S 10	3 15 5	17°12'20	25°18	28°16	18° 4	8°36	8° 4	18°50	29°20	8°32	8°10	10°27	11°21	20°12	21° 6	S 10
M 11	3 19 2	18°12'39	9♌26	29°16	19°20	9°17	8° 5	18°48	29°23	8°34	8°12	10°24	11°18	20°19	21° 3	M 11
T 12	3 22 58	19°13'00	23°25	0♉22	20°35	9°58	8° 7	18°47	29°27	8°36	8°14	10°20	11°15	20°26	21° 1	T 12
W 13	3 26 55	20°13'23	7♉13	1°33	21°50	10°39	8° 8	18°46	29°30	8°38	8°16	10°18	11°11	20°32	20°59	W 13
T 14	3 30 51	21°13'48	20°46	2°47	23° 6	11°20	8°10	18°44	29°34	8°40	8°18	10°16	11° 8	20°39	20°56	T 14
F 15	3 34 48	22°14'14	4♌ 2	4° 5	24°21	12° 1	8°13	18°43	29°38	8°42	8°20	10°D15	11° 5	20°46	20°54	F 15
S 16	3 38 45	23°14'42	16°59	5°25	25°36	12°42	8°15	18°41	29°41	8°45	8°22	10°15	11° 2	20°53	20°52	S 16
S 17	3 42 41	24°15'11	29°38	6°48	26°52	13°24	8°18	18°40	29°45	8°47	8°23	10°15	10°59	20°59	20°50	S 17
M 18	3 46 38	25°15'42	12♌ 1	8°13	28° 7	14° 5	8°21	18°38	29°48	8°49	8°25	10°17	10°56	21° 6	20°48	M 18
T 19	3 50 34	26°16'14	24°10	9°40	29°23	14°46	8°24	18°36	29°52	8°51	8°27	10°18	10°52	21°13	20°45	T 19
W 20	3 54 31	27°16'48	6♌ 9	11° 8	0♌38	15°27	8°27	18°34	29°55	8°53	8°28	10°19	10°49	21°19	20°43	W 20
T 21	3 58 27	28°17'23	18° 2	12°38	1°53	16° 9	8°30	18°31	29°59	8°56	8°30	10°20	10°46	21°26	20°41	T 21
F 22	4 2 24	29°17'58	29°54	14° 8	3° 9	16°50	8°34	18°29	0♉ 2	8°58	8°32	10°R20	10°43	21°33	20°39	F 22
S 23	4 6 20	0♌18°35	11♌50	15°39	4°24	17°31	8°38	18°27	0° 5	9° 0	8°33	10°20	10°40	21°40	20°37	S 23
S 24	4 10 17	1°19'14	23°54	17°11	5°39	18°13	8°42	18°24	0° 9	9° 2	8°35	10°19	10°37	21°46	20°35	S 24
M 25	4 14 14	2°19'53	6♌11	18°43	6°55	18°54	8°46	18°22	0°12	9° 5	8°37	10°18	10°33	21°53	20°33	M 25
T 26	4 18 10	3°20'33	18°43	20°15	8°10	19°36	8°50	18°19	0°16	9° 7	8°38	10°17	10°30	22° 0	20°32	T 26
W 27	4 22 7	4°21'15	1♌35	21°48	9°25	20°17	8°55	18°16	0°19	9° 9	8°40	10°16	10°27	22° 6	20°30	W 27
T 28	4 26 3	5°21'58	14°47	23°21	10°41	20°59	9° 0	18°13	0°22	9°11	8°41	10°16	10°24	22°13	20°28	T 28
F 29	4 30 0	6°22'42	28°18	24°55	11°56	21°40	9° 5	18°10	0°25	9°14	8°43	10°16	10°21	22°20	20°26	F 29
S 30	4 33 56	7♌23°27	12♉ 9	26♉28	13♌12	22♉22	9♌10	18♌ 7	0♉29	9♌16	8♌44	10°D15	10♌17	22♌27	20°Y24	S 30

Day	☉	☾	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	14s14	19n27	1n51	8s49	1n 7	12s53	0n57	11s58	0n24	9s50	1s22	21n38	0s28	10s33	0n31	20s10	1n32	11n49	16n17	22s 1	22s12	10s33	9n10	0n51	
S 2	14 33	21 27	0 40	8 27	1 21	13 19	0 55	12 12	0 23	9 50	1 22	21 38	0 28	10 34	0 31	20 11	1 32	11 49	16 17	22 1	22 12	10 31	9 9	0 51	
S 3	14 52	22 13	0s35	8 11	1 34	13 45	0 53	12 27	0 23	9 50	1 21	21 38	0 28	10 36	0 31	20 11	1 32	11 48	16 17	22 1	22 12	10 28	9 8	0 51	
M 4	15 11	21 38	1 48	8 0	1 45	14 10	0 51	12 41	0 22	9 50	1 21	21 39	0 28	10 37	0 31	20 11	1 32	11 48	16 18	22 1	22 11	10 26	9 7	0 51	
T 5	15 30	19 44	2 56	7 56	1 54	14 35	0 50	12 55	0 22	9 50	1 21	21 39	0 28	10 38	0 31	20 12	1 32	11 47	16 18	22 1	22 11	10 23	9 6	0 51	
W 6	15 48	16 38	3 54	7 56	2 2	15 0	0 48	13 9	0 21	9 49	1 21	21 39	0 28	10 40	0 31	20 12	1 31	11 47	16 18	22 2	22 10	10 21	9 5	0 51	
T 7	16 6	12 34	4 38	8 2	2 8	15 24	0 46	13 23	0 21	9 49	1 21	21 39	0 28	10 41	0 31	20 12	1 31	11 46	16 19	22 2	22 10	10 19	9 4	0 51	
F 8	16 24	7 46	5 5	8 12	2 12	15 48	0 44	13 37	0 20	9 48	1 20	21 39	0 28	10 42	0 31	20 13	1 31	11 46	16 19	22 2	22 9	10 16	9 3	0 51	
S 9	16 41	2 34	5 14	8 26	2 15	16 12	0 41	13 51	0 20	9 48	1 20	21 39	0 28	10 43	0 31	20 13	1 31	11 45	16 19	22 1	22 9	10 14	9 2	0 51	
S 10	16 58	2s47	5 4	8 44	2 17	16 35	0 39	14 4	0 19	9 47	1 20	21 39	0 28	10 45	0 31	20 13	1 31	11 45	16 20	22 1	22 9	10 12	9 1	0 51	
M 11	17 15	7 57	4 35	9 5	2 17	16 58	0 37	14 18	0 19	9 46	1 20	21 40	0 28	10 46	0 31	20 14	1 31	11 45	16 20	22 1	22 8	10 9	9 0	0 51	
T 12	17 32	12 39	3 50	9 28	2 16	17 20	0 35	14 31	0 18	9 46	1 20	21 40	0 28	10 47	0 31	20 14	1 31	11 44	16 20	22 0	22 8	10 7	8 59	0 50	
W 13	17 48	16 38	2 52	9 54	2 15	17 42	0 33	14 45	0 17	9 45	1 19	21 40	0 28	10 49	0 31	20 14	1 31	11 44	16 21	22 0	22 7	10 4	8 58	0 50	
T 14	18 4	19 39	1 45	10 22	2 13	18 3	0 31	14 58	0 17	9 44	1 19	21 40	0 28	10 50	0 31	20 15	1 31	11 44	16 21	21 59	22 7	10 2	8 57	0 50	
F 15	18 20	21 31	0 34	10 51	2 10	18 24	0 28	15 11	0 16	9 43	1 19	21 41	0 28	10 51	0 31	20 15	1 31	11 43	16 22	21 59	22 6	10 0	8 56	0 50	
S 16	18 35	22 11	0n37	11 21	2 6	18 44	0 26	15 24	0 16	9 42	1 19	21 41	0 28	10 52	0 31	20 16	1 31	11 43	16 22	21 59	22 6	9 57	8 55	0 50	
S 17	18 50	21 41	1 45	11 52	2 2	19 4	0 24	15 37	0 15	9 40	1 19	21 41	0 28	10 54	0 32	20 16	1 31	11 43	16 22	21 59	22 6	9 55	8 54	0 50	
M 18	19 5	20 8	2 47	12 24	1 57	19 24	0 22	15 50	0 15	9 39	1 18	21 41	0 28	10 55	0 32	20 16	1 31	11 42	16 23	22 0	22 5	9 52	8 53	0 50	
T 19	19 19	17 40	3 40	12 57	1 52	19 42	0 19	16 3	0 14	9 38	1 18	21 42	0 27	10 56	0 32	20 17	1 31	11 42	16 23	22 0	22 5	9 50	8 52	0 50	
W 20	19 33	14 30	4 22	13 29	1 46	20 1	0 17	16 15	0 14	9 36	1 18	21 42	0 27	10 57	0 32	20 17	1 31	11 42	16 24	22 0	22 4	9 48	8 51	0 50	
T 21	19 47	10 46	4 53	14 2	1 40	20 18	0 15	16 28	0 13	9 35	1 18	21 43	0 27	10 58	0 32	20 17	1 31	11 42	16 24	22 0	22 4	9 45	8 51	0 50	
F 22	20 0	6 38	5 12	14 35	1 34	20 35	0 12	16 40	0 12	9 33	1 17	21 43	0 27	11 0	0 32	20 18	1 31	11 41	16 25	22 0	22 3	9 43	8 50	0 49	
S 23	20 13	2 14	5 17	15 8	1 28	20 52	0 10	16 52	0 12	9 32	1 17	21 43	0 27	11 1	0 32	20 18	1 31	11 41	16 25	22 0	22 3	9 40	8 49	0 49	
S 24	20 26	2n18	5 8	15 40	1 21	21 8	0 7	17 4	0 11	9 30	1 17	21 44	0 27	11 2	0 32	20 18	1 31	11 41	16 25	22 0	22 2	9 38	8 48	0 49	
M 25	20 38	6 49	4 45	16 12	1 15	21 23	0 5	17 16	0 11	9 28	1 17	21 44	0 27	11 3	0 32	20 19	1 31	11 41	16 26	22 0	22 2	9 36	8 47	0 49	
T 26	20 50	11 10	4 8	16 43	1 8	21 38	0 3	17 28	0 10	9 26	1 17	21 45	0 27	11 4	0 32	20 19	1 31	11 41	16 26	22 0	22 1	9 33	8 46	0 49	
W 27	21 1	15 8	3 18	17 14	1 1	21 52	0 0	17 40	0 10	9 25	1 16	21 45	0 27	11 5	0 32	20 19	1 31	11 40	16 27	21 59	22 1	9 31	8 46	0 49	
T 28	21 12	18 27	2 17	17 45	0 54	22 5	0s 2	17 52	0 9	9 23	1 16	21 45	0 27	11 7	0 32	20 20	1 31	11 40	16 27	21 59	22 1	9 29	8 45	0 49	
F 29	21 23	20 51	1 6	18 14	0 47	22 18	0 5	18 3	0 8	9 20	1 16	21 46	0 27	11 8	0 32	20 20	1 31	11 40	16 28	21 59	22 0	9 26	8 44	0 49	
S 30	21s33	22n 5	0s10	18s43	0n40	22s30	0s 7	18s14	0n 8	9s18	1s16	21n46	0s27	11s 9	0n32	20s20	1n31	11n40	16n28	21s59	22s 0	9s24	8n43	0n49	

# ASTRODIENST EPHEMERIS for the year 1974

## geocentric

DECEMBER 1974

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 37 53	8♌24'14	26♏14	28♏ 2	14♌27	23♏ 4	9♏15	18°R 4	0♏32	9♌18	8♏45	10♌16	10♌14	22♏33	20°R23	S 1
M 2	4 41 50	9°25'01	10♏30	29°35	15°42	23°46	9°20	18♏ 1	0°35	9°20	8°47	10°16	10°11	22°40	20°Y21	M 2
T 3	4 45 46	10°25'51	24°53	1♌ 9	16°58	24°27	9°26	17°58	0°38	9°23	8°48	10°R16	10° 8	22°47	20°20	T 3
W 4	4 49 43	11°26'41	9♏17	2°43	18°13	25° 9	9°32	17°54	0°41	9°25	8°49	10°16	10° 5	22°53	20°18	W 4
T 5	4 53 39	12°27'33	23°39	4°17	19°28	25°51	9°38	17°51	0°44	9°27	8°51	10°15	10° 2	23° 0	20°17	T 5
F 6	4 57 36	13°28'26	7♏54	5°50	20°44	26°33	9°44	17°47	0°47	9°30	8°52	10°D15	9°58	23° 7	20°15	F 6
S 7	5 1 32	14°29'21	22° 1	7°24	21°59	27°15	9°50	17°43	0°50	9°32	8°53	10°15	9°55	23°14	20°14	S 7
S 8	5 5 29	15°30'16	5♏57	8°58	23°15	27°57	9°57	17°40	0°53	9°34	8°54	10°16	9°52	23°20	20°13	S 8
M 9	5 9 25	16°31'13	19°42	10°32	24°30	28°39	10° 4	17°36	0°56	9°36	8°56	10°16	9°49	23°27	20°11	M 9
T 10	5 13 22	17°32'12	3♏14	12° 6	25°45	29°21	10°10	17°32	0°59	9°39	8°57	10°17	9°46	23°34	20°10	T 10
W11	5 17 19	18°33'11	16°34	13°40	27° 1	0♌ 3	10°17	17°28	1° 2	9°41	8°58	10°18	9°42	23°40	20° 9	W11
T 12	5 21 15	19°34'12	29°41	15°13	28°16	0°46	10°25	17°24	1° 5	9°43	8°59	10°18	9°39	23°47	20° 8	T 12
F 13	5 25 12	20°35'13	12♌35	16°47	29°31	1°28	10°32	17°20	1° 8	9°45	9° 0	10°R18	9°36	23°54	20° 7	F 13
S 14	5 29 8	21°36'16	25°16	18°22	0♌47	2°10	10°39	17°16	1°10	9°47	9° 1	10°18	9°33	24° 1	20° 6	S 14
S 15	5 33 5	22°37'19	7♏44	19°56	2° 2	2°52	10°47	17°12	1°13	9°50	9° 2	10°17	9°30	24° 7	20° 5	S 15
M16	5 37 1	23°38'22	20° 0	21°30	3°18	3°35	10°55	17° 7	1°16	9°52	9° 3	10°15	9°27	24°14	20° 4	M16
T 17	5 40 58	24°39'27	2♏ 6	23° 4	4°33	4°17	11° 3	17° 3	1°18	9°54	9° 4	10°13	9°23	24°21	20° 3	T 17
W18	5 44 54	25°40'31	14° 4	24°39	5°48	4°59	11°11	16°59	1°21	9°56	9° 5	10°10	9°20	24°28	20° 2	W18
T 19	5 48 51	26°41'37	25°57	26°13	7° 4	5°42	11°19	16°54	1°23	9°59	9° 6	10° 8	9°17	24°34	20° 2	T 19
F 20	5 52 48	27°42'42	7♏48	27°48	8°19	6°24	11°27	16°50	1°26	10° 1	9° 6	10° 6	9°14	24°41	20° 1	F 20
S 21	5 56 44	28°43'48	19°42	29°23	9°34	7° 7	11°36	16°45	1°28	10° 3	9° 7	10° 5	9°11	24°48	20° 0	S 21
S 22	6 0 41	29°44'54	1°Y43	0♌58	10°50	7°50	11°45	16°40	1°31	10° 5	9° 8	10°D 5	9° 8	24°54	20° 0	S 22
M23	6 4 37	0♌46'00	13°56	2°34	12° 5	8°32	11°53	16°36	1°33	10° 7	9° 9	10° 5	9° 4	25° 1	19°59	M23
T 24	6 8 34	1°47'06	26°26	4° 9	13°20	9°15	12° 2	16°31	1°36	10° 9	9° 9	10° 7	9° 1	25° 8	19°59	T 24
W25	6 12 30	2°48'13	9♏16	5°45	14°36	9°58	12°12	16°26	1°38	10°11	9°10	10° 8	8°58	25°15	19°58	W25
T 26	6 16 27	3°49'20	22°30	7°21	15°51	10°40	12°21	16°22	1°40	10°14	9°10	10°10	8°55	25°21	19°58	T 26
F 27	6 20 23	4°50'27	6♏10	8°57	17° 6	11°23	12°30	16°17	1°42	10°16	9°11	10°R11	8°52	25°28	19°58	F 27
S 28	6 24 20	5°51'34	20°15	10°34	18°22	12° 6	12°40	16°12	1°45	10°18	9°12	10°10	8°48	25°35	19°58	S 28
S 29	6 28 17	6°52'41	4♏42	12°11	19°37	12°49	12°49	16° 7	1°47	10°20	9°12	10° 9	8°45	25°41	19°57	S 29
M30	6 32 13	7°53'49	19°25	13°48	20°52	13°32	12°59	16° 2	1°49	10°22	9°13	10° 6	8°42	25°48	19°57	M30
T 31	6 36 10	8♌54'56	4♏18	15♌25	22♌ 8	14♌15	13♏ 9	15♏57	1♏51	10♌24	9♏13	10♌ 2	8♌39	25♏55	19°Y57	T 31

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	21s43	21n56	1s28	19s12	0n33	22s41	0s 9	18s26	0n 7	9s16	1s16	21n47	0s27	11s10	0n32	20s21	1n31	11n40	16n29	21s59	21s59	9s21	8n43	0n48			
M 2	21 52	20 22	2 40	19 39	0 26	22 52	0 12	18 37	0 7	9 14	1 15	21 47	0 27	11 11	0 32	20 21	1 31	11 40	16 29	21 59	21 59	9 19	8 42	0 48			
T 3	22 1	17 30	3 43	20 5	0 19	23 2	0 14	18 47	0 6	9 12	1 15	21 48	0 27	11 12	0 32	20 22	1 31	11 40	16 30	21 59	21 58	9 17	8 41	0 48			
W 4	22 9	13 33	4 32	20 31	0 11	23 12	0 17	18 58	0 5	9 9	1 15	21 48	0 27	11 13	0 32	20 22	1 31	11 40	16 30	21 59	21 58	9 14	8 41	0 48			
T 5	22 17	8 51	5 4	20 56	0 5	23 20	0 19	19 9	0 5	9 7	1 15	21 49	0 26	11 14	0 32	20 22	1 31	11 40	16 31	21 59	21 57	9 12	8 40	0 48			
F 6	22 25	3 42	5 17	21 19	0s 2	23 28	0 21	19 19	0 4	9 4	1 15	21 49	0 26	11 15	0 32	20 23	1 31	11 40	16 31	21 59	21 57	9 9	8 39	0 48			
S 7	22 32	1s35	5 11	21 42	0 9	23 36	0 24	19 29	0 4	9 2	1 14	21 50	0 26	11 16	0 32	20 23	1 31	11 40	16 32	21 59	21 56	9 7	8 39	0 48			
S 8	22 39	6 44	4 46	22 4	0 16	23 42	0 26	19 39	0 3	8 59	1 14	21 51	0 26	11 17	0 32	20 23	1 31	11 40	16 32	21 59	21 56	9 5	8 38	0 48			
M 9	22 46	11 29	4 5	22 24	0 23	23 48	0 28	19 49	0 2	8 56	1 14	21 51	0 26	11 18	0 32	20 24	1 31	11 40	16 33	21 59	21 55	9 2	8 38	0 48			
T 10	22 51	15 35	3 11	22 44	0 29	23 53	0 31	19 59	0 2	8 54	1 14	21 52	0 26	11 19	0 32	20 24	1 31	11 40	16 33	22 0	21 55	9 0	8 37	0 47			
W11	22 57	18 50	2 8	23 2	0 36	23 57	0 33	20 9	0 1	8 51	1 14	21 52	0 26	11 20	0 32	20 24	1 31	11 40	16 34	22 0	21 55	8 57	8 36	0 47			
T 12	23 2	21 2	0 59	23 19	0 42	24 1	0 35	20 18	0 0	8 48	1 13	21 53	0 26	11 21	0 32	20 25	1 31	11 40	16 34	22 0	21 54	8 55	8 36	0 47			
F 13	23 6	22 6	0n13	23 35	0 48	24 4	0 38	20 27	0s 0	8 45	1 13	21 54	0 26	11 22	0 32	20 25	1 31	11 40	16 35	22 0	21 54	8 53	8 35	0 47			
S 14	23 11	22 0	1 22	23 50	0 54	24 6	0 40	20 37	0 1	8 42	1 13	21 54	0 26	11 23	0 32	20 25	1 31	11 40	16 36	22 0	21 53	8 50	8 35	0 47			
S 15	23 14	20 47	2 26	24 3	1 0	24 7	0 42	20 45	0 1	8 39	1 13	21 55	0 26	11 24	0 32	20 25	1 31	11 40	16 36	22 0	21 53	8 48	8 35	0 47			
M16	23 17	18 37	3 22	24 16	1 6	24 8	0 44	20 54	0 2	8 36	1 13	21 55	0 26	11 25	0 32	20 26	1 31	11 40	16 37	21 59	21 52	8 45	8 34	0 47			
T 17	23 20	15 39	4 9	24 27	1 11	24 8	0 46	21 3	0 3	8 32	1 12	21 56	0 25	11 26	0 32	20 26	1 31	11 41	16 37	21 59	21 52	8 43	8 34	0 47			
W18	23 22	12 5	4 44	24 37	1 17	24 7	0 48	21 11	0 3	8 29	1 12	21 57	0 25	11 27	0 32	20 26	1 31	11 41	16 38	21 59	21 51	8 40	8 33	0 47			
T 19	23 24	8 4	5 6	24 45	1 22	24 6	0 50	21 19	0 4	8 26	1 12	21 57	0 25	11 28	0 32	20 27	1 31	11 41	16 38	21 58	21 51	8 38	8 33	0 46			
F 20	23 25	3 46	5 15	24 52	1 27	24 3	0 52	21 27	0 4	8 23	1 12	21 58	0 25	11 29	0 32	20 27	1 31	11 41	16 39	21 58	21 50	8 36	8 32	0 46			
S 21	23 26	0n42	5 11	24 58	1 32	24 0	0 55	21 35	0 5	8 19	1 12	21 59	0 25	11 29	0 32	20 27	1 31	11 41	16 39	21 58	21 50	8 33	8 32	0 46			
S 22	23 26	5 10	4 53	25 2	1 36	23 56	0 56	21 43	0 6	8 16	1 12	21 59	0 25	11 30	0 32	20 28	1 31	11 42	16 40	21 58	21 49	8 31	8 32	0 46			
M23	23 26	9 31	4 22	25 5	1 40	23 52	0 58	21 50	0 6	8 12	1 11	22 0	0 25	11 31	0 32	20 28	1 31	11 42	16 41	21 58	21 49	8 28	8 32	0 46			
T 24	23 26	13 35	3 38	25 7	1 44	23 46	1 0	21 57	0 7	8 9	1 11	22 1	0 25	11 32	0 32	20 28	1 31	11 42	16 41	21 58	21 48	8 26	8 31	0 46			
W25	23 25	17 9	2 42	25 7	1 48	23 40	1 2	22 4	0 8	8 5	1 11	22 1	0 25	11 33	0 32	20 29	1 31	11 42	16 42	21 58	21 48	8 24	8 31	0 46			
T 26	23 23	19 56	1 36	25 6	1 52	23 34	1 4	22 11	0 8	8 1	1 11	22 2	0 25	11 33	0 32	20 29	1 31	11 43	16 42	21 59	21 47	8 21	8 31	0 46			
F 27	23 21	21 42	0 22	25 3	1 55	23 26	1 6	22 18	0 9	7 58	1 11	22 3	0 25	11 34	0 32	20 29	1 31	11 43	16 43	21 59	21 47	8 19	8 31	0 46			
S 28	23 19	22 10	0s55	24 59	1 58	23 18	1 8	22 24	0 10	7 54	1 11	22 3	0 24	11 35	0 32	20 29	1 31	11 43	16 43	21 59	21 46	8 16	8 30	0 45			
S 29	23 16	21 11	2 11	24 53	2 1	23 9	1 9	22 30	0 10	7 50	1 10	22 4	0 24	11 35	0 32	20 30	1 31	11 44	16 44	21 58	21 46	8 14	8 30	0 45			
M30	23 12	18 45	3 19	24 46	2 3	22 59	1 11	22 36	0 11	7 46	1 10	22 5	0 24	11 36	0 32	20 30	1 31	11 44	16 45	21 58	21 45	8 12	8 30	0 45			
T 31	23s 9	15n 4	4s14	24s37	2s 5	22s49	1s12	22s42	0s12	7s42	1s10	22n 5	0s24	11s37	0n32	20s30	1n31	11n44	16n45	21s57	21s45	8s 9	8n30	0n45			