



# Astrodienst Ephemeris Tables for the year 1469

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 1469

geocentric

JANUARY 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	7 17 48	19°35'57	26°04'44	8°33'34	3°37'37	12°27'25	29°R24	22°Y38	16°25	9°12	8°R25	13°20	14°40	18°11	21°34	S 1
M 2	7 21 44	21° 0'02	10°03'38	9°41'43	4°33'13	8° 29°16	22°40	16°25	9°13	8°R24	13°21	14°37	18°18	21°39	M 2	
T 3	7 25 41	22° 1'06	24° 4'24	10°43'50	5°30'13	50° 29° 8	22°42	16°26	9°14	8°23	13°22	14°34	18°25	21°44	T 3	
W 4	7 29 37	23° 2'10	7°14'4	11°37'6	6°27'14	14°33'29	29° 1	22°44	16°26	9°15	8°22	13°24	14°31	18°31	21°50	W 4
T 5	7 33 34	24° 3'13	19°42'12	12°23'7	7°25'15	15°16'28	28°53	22°46	16°26	9°16	8°21	13°R25	14°27	18°38	21°55	T 5
F 6	7 37 30	25° 4'17	2°11'1	13° 1'8	8°23'15	15°59'28	28°45	22°49	16°27	9°17	8°20	13°24	14°24	18°45	22° 0	F 6
S 7	7 41 27	26° 5'19	14° 7'13	13°29'9	9°22'16	16°42'28	28°37	22°51	16°27	9°18	8°19	13°23	14°21	18°52	22° 5	S 7
S 8	7 45 24	27° 6'21	26° 3'13	13°47'10	10°21'17	17°25'28	28°29	22°54	16°27	9°18	8°18	13°22	14°18	18°58	22°11	S 8
M 9	7 49 20	28° 7'23	7°15'4	13°R55'11	11°20'18	18° 8'28	28°20	22°56	16°27	9°19	8°17	13°19	14°15	19° 5	22°16	M 9
T 10	7 53 17	29° 8'24	19°44'13	13°51'12	12°20'18	18°51'28	28°12	22°59	16°28	9°20	8°15	13°17	14°12	19°12	22°21	T 10
W11	7 57 13	0° 9'24	1°33'5	13°35'13	13°21'19	19°34'28	28° 4	23° 2	16°R28	9°21	8°14	13°15	14° 8	19°18	22°26	W11
T 12	8 1 10	1°10'23	13°31'13	13° 9'14	14°21'20	17°56'23	23° 5	16°28	9°21	8°13	13°13	14° 5	19°25	22°32	T 12	
F 13	8 5 6	2°11'22	25°35'12	12°31'15	15°23'21	21° 0'27	27°48	23° 8	16°27	9°22	8°12	13°12	14° 2	19°32	22°37	F 13
S 14	8 9 3	3°12'19	7°46'11	11°44'16	16°24'21	43° 27°40	23°11	16°27	9°23	8°11	13°D11	13°59	19°38	22°42	S 14	
S 15	8 13 0	4°13'15	20° 7'10	10°47'17	17°26'22	26° 27°32	23°14	16°27	9°23	8°10	13°11	13°56	19°45	22°47	S 15	
M16	8 16 56	5°14'10	2°40'9	9°44'18	18°28'23	9° 27°25	23°17	16°27	9°24	8° 8	13°12	13°52	19°52	22°52	M16	
T 17	8 20 53	6°15'04	15°25'8	8°36'19	19°31'23	52° 27°17	23°21	16°27	9°24	8° 7	13°13	13°49	19°59	22°57	T 17	
W18	8 24 49	7°15'56	28°23'7	24°36'20	34° 27° 9	23°24	16°26	9°25	8° 6	13°13	13°46	20° 5	23° 2	W18		
T 19	8 28 46	8°16'47	11°Y36	6°11'21	13°37'25	19°27	1	23°28	16°26	9°25	8° 4	13°14	13°43	20°12	23° 8	T 19
F 20	8 32 42	9°17'37	25° 6'4	4°58'22	40° 26° 2	26°53	23°32	16°25	9°25	8° 3	13°14	13°40	20°19	23°13	F 20	
S 21	8 36 39	10°18'25	8°51'3	49° 23°44	46° 26°46	23°36	16°25	9°26	8° 2	13°R14	13°37	20°25	23°18	S 21		
S 22	8 40 35	11°19'11	22°54'2	44° 24°48	27°29	26°38	23°39	16°24	9°26	8° 0	13°14	13°33	20°32	23°23	S 22	
M23	8 44 32	12°19'56	7°12'1	44° 25°52	28°12	26°31	23°43	16°24	9°26	7°59	13°14	13°30	20°39	23°28	M23	
T 24	8 48 29	13°20'39	21°43'0	52° 26°57	28°56	26°23	23°48	16°23	9°27	7°58	13°D14	13°27	20°45	23°33	T 24	
W25	8 52 25	14°21'21	6°23'0	6° 28° 2	29°39	26°16	23°52	16°22	9°27	7°56	13°14	13°24	20°52	23°38	W25	
T 26	8 56 22	15°22'01	21° 6'29	29° 7'0	23°23	26° 9	23°56	16°22	9°27	7°55	13°14	13°21	20°59	23°43	T 26	
F 27	9 0 18	16°22'40	5°46'29	0°12'1	6° 26° 2	24° 0	16°21	9°27	7°53	13°14	13°18	21° 5	23°48	F 27		
S 28	9 4 15	17°23'16	20°16'28	38° 1°18	1°50	25°55	24° 5	16°20	9°27	7°52	13°R14	13°14	21°12	23°53	S 28	
S 29	9 8 11	18°23'52	4°19'28	25° 2°23	33° 2°33	25°48	24° 9	16°19	9°27	7°50	13°14	13°11	21°19	23°58	S 29	
M30	9 12 8	19°24'26	18°22'28	D18° 3°29	17° 3°17	25°41	24°14	16°18	9°28	7°49	13°14	13° 8	21°26	24° 2	M30	
T 31	9 16 4	20°24'58	1°51'28	20° 4°35	35° 4°38	0° 25°34	24°Y19	16°17	9°R28	7°47	13°13	13° 5	21°32	24° 7	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
S 1	22s 1	11n29	1s13	18s50	0s41	17s 2	3n58	22s26	0s 5	20n57	0n38	6n31	2s30	5s52	0n39	12s54	1n48	21n39	14n18	16s52	16s29	27s16	15s25	6n26	
M 2	21 52	5 22	2 25	18 20	0 28	17 14	3 57	22 32	0 6	20 59	0 38	6 32	2 30	5 52	0 39	12 54	1 48	21 39	14 19	16 52	16 30	27 16	15 24	6 26	
T 3	21 42	0s47	3 26	17 50	0 15	17 25	3 56	22 38	0 7	21 1	0 38	6 33	2 29	5 52	0 39	12 54	1 48	21 40	14 19	16 51	16 31	27 16	15 23	6 26	
W 4	21 32	6 42	4 14	17 21	0 0	17 36	3 54	22 44	0 7	21 2	0 38	6 34	2 29	5 52	0 39	12 55	1 48	21 41	14 20	16 51	16 32	27 16	15 23	6 26	
T 5	21 22	12 11	4 49	16 53	0n15	17 47	3 52	22 50	0 8	21 4	0 38	6 35	2 29	5 53	0 39	12 55	1 48	21 42	14 20	16 51	16 33	27 16	15 22	6 26	
F 6	21 11	17 2	5 9	16 27	0 32	17 58	3 51	22 55	0 9	21 6	0 38	6 36	2 29	5 53	0 40	12 55	1 48	21 42	14 20	16 51	16 34	27 16	15 21	6 26	
S 7	21 0	21 8	5 16	16 3	0 49	18 9	3 49	23 0	0 10	21 8	0 38	6 37	2 28	5 53	0 40	12 55	1 48	21 43	14 21	16 51	16 34	27 16	15 20	6 26	
S 8	20 48	24 18	5 8	15 41	1 6	18 20	3 46	23 5	0 10	21 9	0 39	6 38	2 28	5 53	0 40	12 55	1 48	21 44	14 21	16 52	16 35	27 16	15 19	6 26	
M 9	20 36	26 25	4 47	15 22	1 24	18 30	3 44	23 10	0 11	21 11	0 39	6 39	2 28	5 53	0 40	12 56	1 48	21 45	14 21	16 52	16 36	27 16	15 18	6 26	
T 10	20 23	27 20	4 14	15 6	1 42	18 41	3 42	23 14	0 12	21 13	0 39	6 41	2 27	5 53	0 40	12 56	1 49	21 45	14 22	16 53	16 37	27 16	15 17	6 26	
W11	20 11	27 0	3 30	14 53	2 0	18 51	3 39	23 18	0 13	21 15	0 39	6 42	2 27	5 53	0 40	12 56	1 49	21 46	14 22	16 53	16 38	27 16	15 17	6 27	
T 12	19 57	25 25	2 37	14 44	2 17	19 0	3 37	23 22	0 13	21 16	0 39	6 43	2 27	5 53	0 40	12 56	1 49	21 47	14 23	16 54	16 39	27 16	15 16	6 27	
F 13	19 44	22 40	1 36	14 38	2 34	19 10	3 34	23 26	0 14	21 18	0 39	6 45	2 27	5 53	0 40	12 56	1 49	21 48	14 23	16 54	16 40	27 16	15 15	6 27	
S 14	19 30	18 52	0 30	14 37	2 49	19 19	3 31	23 30	0 15	21 20	0 39	6 46	2 26	5 53	0 40	12 56	1 49	21 48	14 23	16 55	16 41	27 17	15 14	6 27	
S 15	19 16	14 13	0n38	14 38	3 3	19 28	3 28	23 33	0 16	21 22	0 39	6 48	2 26	5 53	0 40	12 57	1 49	21 49	14 24	16 54	16 42	27 17	15 13	6 27	
M16	19 1	8 54	1 46	14 44	3 15	19 36	3 25	23 36	0 16	21 23	0 40	6 49	2 26	5 52	0 40	12 57	1 49	21 50	14 24	16 54	16 43	27 17	15 12	6 27	
T 17	18 46	3 10	2 49	14 52	3 25	19 45	3 22	23 39	0 17	21 25	0 40	6 51	2 25	5 52	0 40	12 57	1 49	21 51	14 24	16 54	16 44	27 17	15 11	6 27	
W18	18 31	2n48	3 45	15 3	3 33	19 52	3 19	23 42	0 18	21 26	0 40	6 52	2 25	5 52	0 40	12 57	1 49	21 51	14 24	16 54	16 45	27 17	15 10	6 27	
T 19	18 15	8 45	4 30	15 16	3 38	20 0	3 15	23 44	0 19	21 28	0 40	6 54	2 25	5 52	0 40	12 57	1 49	21 52	14 25	16 54	16 45	27 17	15 9	6 27	
F 20	17 59	14 25	5 2	15 30	3 41	20 7	3 12	23 46	0 19	21 30	0 40	6 55	2 25	5 52	0 40	12 57	1 49	21 53	14 25	16 54	16 46	27 17	15 8	6 27	
S 21	17 43	19 29	5 16	15 46	3 41	20 14	3 8	23 48	0 20	21 31	0 40	6 57	2 24	5 51	0 40	12 57	1 49	21 54	14 25	16 54	16 47	27 17	15 7	6 28	
S 22	17 26	23 35	5 13	16 3	3 39	20 20	3 5	23 50	0 21	21 33	0 40	6 59	2 24	5 51	0 40	12 57	1 49	21 55	14 26	16 54	16 48	27 16	15 6	6 28	
M23	17 9	26 21	4 50	16 20	3 35	20 26	3 1	23 52	0 22	21 34	0 40	7 0	2 24	5 51	0 40	12 57	1 49	21 55	14 26	16 54	16 49	27 16	15 5	6 28	
T 24	16 52	27 23	4 9	16 37	3 29	20 31	2 57	23 53	0 23	21 36	0 40	7 2	2 24	5 51	0 40	12 57	1 49	21 56	14 26	16 54	16 50	27 16	15 4	6 28	
W25	16 34	26 32	3 11	16 54	3 22	20 36	2 54	23 54	0 23	21 37	0 40	7 4	2 23	5 50	0 40	12 57	1 49	21 57	14 26	16 54	16 51	27 16	15 3	6 28	
T 26	16 17	23 49	2 0	17 10	3 13	20 41	2 50	23 55	0 24	21 39	0 40	7 6	2 23	5 50	0 40	12 57	1 49	21 58	14 27	16 54	16 52	27 16	15 2	6 28	
F 27	15 58	19 33	0 41	17 26	3 3	20 45	2 46	23 55	0 25	21 40	0 41	7 8	2 23	5 50	0 40	12 57	1 50	21 59	14 27	16 54	16 53	27 16	15 1	6 29	
S 28	15 40	14 10	0s39	17 41	2 53	20 48	2 42	23 56	0 26	21 42	0 41	7 9	2 23	5 49	0 40	12 57	1 50	21 59	14 27	16 54	16 54	27 16	15 1	6 29	
S 29	15 22	8 6	1 55	17 54	2 41	20 51	2 38	23 56	0 27	21 43	0 41	7 11	2 22	5 49	0 40	12 57	1 50	22 0	14 27	16 54	16 55	27 16	15 0	6 29	
M30	15 3	1 49	3 3	18 7	2 29	20 54	2 34	23 56	0 27	21 44	0 41	7 13	2 22	5 49	0 40	12 57	1 50	22 1	14 28	16 54	16 55	27 16	14 58	6 29	
T 31	14s44	4s23	3s58	18s19	2n17	20s56	2n30	23s55	0s28	21n46	0n41	7n15	2s22	5s48	0n40	12s57	1n50	22n 2	14n28	16s54	16s56	27s16	14s57	6n29	

ASTRODIENST EPHEMERIS for the year 1469  
geocentric

FEBRUARY 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	9 20 1	21 <sup>25</sup> 29	14 <sup>58</sup>	28 <sup>27</sup>	5 <sup>42</sup>	4 <sup>44</sup>	25 <sup>28</sup>	24 <sup>28</sup>	16 <sup>15</sup>	9 <sup>28</sup>	7 <sup>46</sup>	13 <sup>12</sup>	13 <sup>2</sup>	21 <sup>39</sup>	24 <sup>12</sup>	W 1
T 2	9 23 58	22 <sup>25</sup> 59	27 <sup>41</sup>	28 <sup>42</sup>	6 <sup>48</sup>	5 <sup>28</sup>	25 <sup>21</sup>	24 <sup>28</sup>	16 <sup>15</sup>	9 <sup>28</sup>	7 <sup>44</sup>	13 <sup>11</sup>	12 <sup>58</sup>	21 <sup>46</sup>	24 <sup>17</sup>	T 2
F 3	9 27 54	23 <sup>26</sup> 28	10 <sup>11</sup>	29 <sup>2</sup>	7 <sup>55</sup>	6 <sup>12</sup>	25 <sup>15</sup>	24 <sup>33</sup>	16 <sup>14</sup>	9 <sup>27</sup>	7 <sup>43</sup>	13 <sup>10</sup>	12 <sup>55</sup>	21 <sup>52</sup>	24 <sup>22</sup>	F 3
S 4	9 31 51	24 <sup>26</sup> 55	22 <sup>15</sup>	29 <sup>27</sup>	9 <sup>2</sup>	6 <sup>55</sup>	25 <sup>9</sup>	24 <sup>38</sup>	16 <sup>12</sup>	9 <sup>27</sup>	7 <sup>41</sup>	13 <sup>10</sup>	12 <sup>52</sup>	21 <sup>59</sup>	24 <sup>26</sup>	S 4
S 5	9 35 47	25 <sup>27</sup> 21	4 <sup>12</sup>	29 <sup>58</sup>	10 <sup>9</sup>	7 <sup>39</sup>	25 <sup>2</sup>	24 <sup>43</sup>	16 <sup>11</sup>	9 <sup>27</sup>	7 <sup>40</sup>	13 <sup>10</sup>	12 <sup>49</sup>	22 <sup>6</sup>	24 <sup>31</sup>	S 5
M 6	9 39 44	26 <sup>27</sup> 45	16 <sup>4</sup>	0 <sup>33</sup>	11 <sup>16</sup>	8 <sup>23</sup>	24 <sup>57</sup>	24 <sup>48</sup>	16 <sup>10</sup>	9 <sup>27</sup>	7 <sup>38</sup>	13 <sup>10</sup>	12 <sup>46</sup>	22 <sup>12</sup>	24 <sup>36</sup>	M 6
T 7	9 43 40	27 <sup>28</sup> 08	27 <sup>54</sup>	1 <sup>13</sup>	12 <sup>24</sup>	9 <sup>7</sup>	24 <sup>51</sup>	24 <sup>54</sup>	16 <sup>8</sup>	9 <sup>27</sup>	7 <sup>37</sup>	13 <sup>12</sup>	12 <sup>43</sup>	22 <sup>19</sup>	24 <sup>40</sup>	T 7
W 8	9 47 37	28 <sup>28</sup> 30	9 <sup>47</sup>	1 <sup>57</sup>	13 <sup>31</sup>	9 <sup>51</sup>	24 <sup>45</sup>	24 <sup>59</sup>	16 <sup>7</sup>	9 <sup>27</sup>	7 <sup>35</sup>	13 <sup>13</sup>	12 <sup>39</sup>	22 <sup>26</sup>	24 <sup>45</sup>	W 8
T 9	9 51 33	29 <sup>28</sup> 50	21 <sup>47</sup>	2 <sup>45</sup>	14 <sup>39</sup>	10 <sup>34</sup>	24 <sup>40</sup>	25 <sup>4</sup>	16 <sup>6</sup>	9 <sup>26</sup>	7 <sup>34</sup>	13 <sup>14</sup>	12 <sup>36</sup>	22 <sup>32</sup>	24 <sup>49</sup>	T 9
F 10	9 55 30	0 <sup>29</sup> 08	3 <sup>58</sup>	3 <sup>36</sup>	15 <sup>47</sup>	11 <sup>18</sup>	24 <sup>34</sup>	25 <sup>10</sup>	16 <sup>4</sup>	9 <sup>26</sup>	7 <sup>32</sup>	13 <sup>15</sup>	12 <sup>33</sup>	22 <sup>39</sup>	24 <sup>54</sup>	F 10
S 11	9 59 27	1 <sup>29</sup> 25	16 <sup>21</sup>	4 <sup>30</sup>	16 <sup>55</sup>	12 <sup>2</sup>	24 <sup>29</sup>	25 <sup>15</sup>	16 <sup>3</sup>	9 <sup>26</sup>	7 <sup>31</sup>	13 <sup>16</sup>	12 <sup>30</sup>	22 <sup>46</sup>	24 <sup>58</sup>	S 11
S 12	10 3 23	2 <sup>29</sup> 40	28 <sup>59</sup>	5 <sup>27</sup>	18 <sup>3</sup>	12 <sup>46</sup>	24 <sup>24</sup>	25 <sup>21</sup>	16 <sup>1</sup>	9 <sup>25</sup>	7 <sup>29</sup>	13 <sup>15</sup>	12 <sup>27</sup>	22 <sup>53</sup>	25 <sup>3</sup>	S 12
M13	10 7 20	3 <sup>29</sup> 53	11 <sup>52</sup>	6 <sup>27</sup>	19 <sup>12</sup>	13 <sup>30</sup>	24 <sup>19</sup>	25 <sup>27</sup>	15 <sup>59</sup>	9 <sup>25</sup>	7 <sup>27</sup>	13 <sup>13</sup>	12 <sup>23</sup>	22 <sup>59</sup>	25 <sup>7</sup>	M13
T 14	10 11 16	4 <sup>30</sup> 04	25 <sup>0</sup>	7 <sup>29</sup>	20 <sup>20</sup>	14 <sup>14</sup>	24 <sup>15</sup>	25 <sup>33</sup>	15 <sup>58</sup>	9 <sup>24</sup>	7 <sup>26</sup>	13 <sup>10</sup>	12 <sup>20</sup>	23 <sup>6</sup>	25 <sup>12</sup>	T 14
W15	10 15 13	5 <sup>30</sup> 13	8 <sup>23</sup>	8 <sup>34</sup>	21 <sup>29</sup>	14 <sup>58</sup>	24 <sup>10</sup>	25 <sup>38</sup>	15 <sup>56</sup>	9 <sup>24</sup>	7 <sup>24</sup>	13 <sup>7</sup>	12 <sup>17</sup>	23 <sup>13</sup>	25 <sup>16</sup>	W15
T 16	10 19 9	6 <sup>30</sup> 20	21 <sup>58</sup>	9 <sup>42</sup>	22 <sup>37</sup>	15 <sup>42</sup>	24 <sup>6</sup>	25 <sup>44</sup>	15 <sup>54</sup>	9 <sup>23</sup>	7 <sup>23</sup>	13 <sup>4</sup>	12 <sup>14</sup>	23 <sup>19</sup>	25 <sup>20</sup>	T 16
F 17	10 23 6	7 <sup>30</sup> 26	5 <sup>45</sup>	10 <sup>51</sup>	23 <sup>46</sup>	16 <sup>26</sup>	24 <sup>2</sup>	25 <sup>50</sup>	15 <sup>52</sup>	9 <sup>23</sup>	7 <sup>21</sup>	13 <sup>0</sup>	12 <sup>11</sup>	23 <sup>26</sup>	25 <sup>24</sup>	F 17
S 18	10 27 2	8 <sup>30</sup> 29	19 <sup>41</sup>	12 <sup>2</sup>	24 <sup>55</sup>	17 <sup>11</sup>	23 <sup>58</sup>	25 <sup>56</sup>	15 <sup>50</sup>	9 <sup>22</sup>	7 <sup>20</sup>	12 <sup>58</sup>	12 <sup>8</sup>	23 <sup>33</sup>	25 <sup>29</sup>	S 18
S 19	10 30 59	9 <sup>30</sup> 30	3 <sup>11</sup>	13 <sup>16</sup>	26 <sup>4</sup>	17 <sup>55</sup>	23 <sup>54</sup>	26 <sup>2</sup>	15 <sup>49</sup>	9 <sup>22</sup>	7 <sup>18</sup>	12 <sup>57</sup>	12 <sup>4</sup>	23 <sup>39</sup>	25 <sup>33</sup>	S 19
M20	10 34 55	10 <sup>30</sup> 28	17 <sup>53</sup>	14 <sup>31</sup>	27 <sup>13</sup>	18 <sup>39</sup>	23 <sup>50</sup>	26 <sup>8</sup>	15 <sup>47</sup>	9 <sup>21</sup>	7 <sup>16</sup>	12 <sup>57</sup>	12 <sup>1</sup>	23 <sup>46</sup>	25 <sup>37</sup>	M20
T 21	10 38 52	11 <sup>30</sup> 25	2 <sup>5</sup>	15 <sup>48</sup>	28 <sup>22</sup>	19 <sup>23</sup>	23 <sup>47</sup>	26 <sup>15</sup>	15 <sup>45</sup>	9 <sup>20</sup>	7 <sup>15</sup>	12 <sup>58</sup>	11 <sup>58</sup>	23 <sup>53</sup>	25 <sup>41</sup>	T 21
W22	10 42 49	12 <sup>30</sup> 19	16 <sup>21</sup>	17 <sup>6</sup>	29 <sup>31</sup>	20 <sup>7</sup>	23 <sup>43</sup>	26 <sup>21</sup>	15 <sup>43</sup>	9 <sup>20</sup>	7 <sup>13</sup>	13 <sup>0</sup>	11 <sup>55</sup>	23 <sup>59</sup>	25 <sup>45</sup>	W22
T 23	10 46 45	13 <sup>30</sup> 11	0 <sup>46</sup>	18 <sup>26</sup>	0 <sup>41</sup>	20 <sup>51</sup>	23 <sup>40</sup>	26 <sup>27</sup>	15 <sup>41</sup>	9 <sup>19</sup>	7 <sup>12</sup>	13 <sup>1</sup>	11 <sup>52</sup>	24 <sup>6</sup>	25 <sup>49</sup>	T 23
F 24	10 50 42	14 <sup>30</sup> 01	14 <sup>47</sup>	19 <sup>48</sup>	1 <sup>50</sup>	21 <sup>36</sup>	23 <sup>37</sup>	26 <sup>34</sup>	15 <sup>39</sup>	9 <sup>18</sup>	7 <sup>10</sup>	13 <sup>1</sup>	11 <sup>49</sup>	24 <sup>13</sup>	25 <sup>53</sup>	F 24
S 25	10 54 38	15 <sup>29</sup> 48	28 <sup>50</sup>	21 <sup>11</sup>	3 <sup>0</sup>	22 <sup>20</sup>	23 <sup>35</sup>	26 <sup>40</sup>	15 <sup>37</sup>	9 <sup>18</sup>	7 <sup>9</sup>	13 <sup>0</sup>	11 <sup>45</sup>	24 <sup>20</sup>	25 <sup>57</sup>	S 25
S 26	10 58 35	16 <sup>29</sup> 34	12 <sup>43</sup>	22 <sup>36</sup>	4 <sup>10</sup>	23 <sup>4</sup>	23 <sup>32</sup>	26 <sup>46</sup>	15 <sup>35</sup>	9 <sup>17</sup>	7 <sup>7</sup>	12 <sup>58</sup>	11 <sup>42</sup>	24 <sup>26</sup>	26 <sup>0</sup>	S 26
M27	11 2 31	17 <sup>29</sup> 17	26 <sup>21</sup>	24 <sup>2</sup>	5 <sup>19</sup>	23 <sup>48</sup>	23 <sup>30</sup>	26 <sup>53</sup>	15 <sup>32</sup>	9 <sup>16</sup>	7 <sup>5</sup>	12 <sup>53</sup>	11 <sup>39</sup>	24 <sup>33</sup>	26 <sup>4</sup>	M27
T 28	11 6 28	18 <sup>28</sup> 58	9 <sup>42</sup>	25 <sup>29</sup>	6 <sup>29</sup>	24 <sup>33</sup>	23 <sup>28</sup>	27 <sup>0</sup>	15 <sup>30</sup>	9 <sup>15</sup>	7 <sup>4</sup>	12 <sup>48</sup>	11 <sup>36</sup>	24 <sup>40</sup>	26 <sup>8</sup>	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	decl lat	decl lat
W 1	14s24	10s12	4s39	18s30	2n 5	20s58	2n26	23s55	0s29	21n47	0n41	7n17	2s22	5s48	0n40	12s57
T 2	14 5	15 26	5 5	18 39	1 52	20 59	2 22	23 54	0 30	21 48	0 41	7 19	2 21	5 47	0 40	12 57
F 3	13 45	19 53	5 16	18 47	1 40	20 59	2 17	23 53	0 31	21 49	0 41	7 21	2 21	5 47	0 40	12 57
S 4	13 25	23 25	5 13	18 54	1 28	20 59	2 13	23 51	0 32	21 50	0 41	7 23	2 21	5 46	0 40	12 57
S 5	13 4	25 53	4 56	18 59	1 15	20 59	2 9	23 50	0 32	21 52	0 41	7 25	2 21	5 46	0 40	12 57
M 6	12 44	27 11	4 26	19 4	1 3	20 58	2 5	23 48	0 33	21 53	0 41	7 27	2 20	5 45	0 40	12 56
T 7	12 23	27 15	3 45	19 7	0 51	20 56	2 0	23 46	0 34	21 54	0 41	7 30	2 20	5 45	0 40	12 56
W 8	12 2	26 3	2 55	19 8	0 40	20 54	1 56	23 43	0 35	21 55	0 41	7 32	2 20	5 44	0 40	12 56
T 9	11 41	23 39	1 56	19 9	0 29	20 51	1 52	23 41	0 36	21 56	0 41	7 34	2 20	5 44	0 40	12 56
F 10	11 20	20 9	0 51	19 7	0 18	20 48	1 47	23 38	0 37	21 57	0 41	7 36	2 20	5 43	0 41	12 56
S 11	10 59	15 43	0n17	19 5	0 7	20 44	1 43	23 35	0 37	21 58	0 41	7 38	2 19	5 42	0 41	12 56
S 12	10 37	10 31	1 26	19 1	0s 4	20 40	1 39	23 32	0 38	21 59	0 41	7 41	2 19	5 42	0 41	12 56
M13	10 15	4 48	2 31	18 56	0 14	20 35	1 34	23 28	0 39	22 0	0 41	7 43	2 19	5 41	0 41	12 55
T 14	9 53	1n13	3 30	18 50	0 23	20 29	1 30	23 25	0 40	22 1	0 41	7 45	2 19	5 40	0 41	12 55
W15	9 31	7 17	4 18	18 42	0 33	20 23	1 25	23 21	0 41	22 1	0 41	7 47	2 19	5 40	0 41	12 55
T 16	9 9	13 7	4 53	18 33	0 41	20 16	1 21	23 16	0 42	22 2	0 41	7 50	2 18	5 39	0 41	12 55
F 17	8 47	18 22	5 11	18 22	0 50	20 9	1 17	23 12	0 43	22 3	0 41	7 52	2 18	5 38	0 41	12 55
S 18	8 24	22 42	5 12	18 10	0 58	20 1	1 12	23 7	0 43	22 4	0 41	7 54	2 18	5 38	0 41	12 54
S 19	8 2	25 46	4 54	17 57	1 6	19 53	1 8	23 2	0 44	22 4	0 41	7 57	2 18	5 37	0 41	12 54
M20	7 39	27 14	4 18	17 42	1 14	19 44	1 4	22 57	0 45	22 5	0 41	7 59	2 18	5 36	0 41	12 54
T 21	7 16	26 55	3 26	17 26	1 21	19 35	0 59	22 52	0 46	22 6	0 42	8 2	2 17	5 35	0 41	12 54
W22	6 53	24 50	2 21	17 8	1 27	19 25	0 55	22 46	0 47	22 6	0 42	8 4	2 17	5 35	0 41	12 53
T 23	6 30	21 11	1 8	16 50	1 34	19 14	0 51	22 40	0 48	22 7	0 42	8 6	2 17	5 34	0 41	12 53
F 24	6 7	16 18	0s10	16 30	1 39	19 3	0 47	22 34	0 49	22 7	0 42	8 9	2 17	5 33	0 41	12 53
S 25	5 44	10 35	1 25	16 8	1 45	18 51	0 42	22 28	0 50	22 8	0 42	8 11	2 17	5 32	0 41	12 52
S 26	5 21	4 25	2 35	15 45	1 50	18 39	0 38	22 22	0 50	22 8	0 42	8 14	2 16	5 31	0 41	12 52
M27	4 57	1s50	3 34	15 21	1 55	18 27	0 34	22 15	0 51	22 8	0 42	8 16	2 16	5 30	0 41	12 52
T 28	4s34	7s51	4s21	14s56	1s59	18s13	0n30	22s 8	0s52	22n 9	0n42	8n19	2s16	5s30	0n41	12s52

Julian Day Number = 2257641.5, Delta T = 05m54s

Ecliptic obliquity = 23°30'36", Nutation = 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°19'59", Lahiri = 16°27'00" Julian Calendar 1 Feb. 1469 == Greg. Calendar 10 Feb. 1469

ASTRODIENST EPHEMERIS for the year 1469  
geocentric

MARCH 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	11 10 24	19°28'38	22°45	26°58	7°39	25°17	23°R26	27°Y 6	15°R28	9°R14	7°R 2	12°R41	11°33	24°46	26°11	W 1
T 2	11 14 21	20°28'15	5°M28	28°28	8°49	26° 1	23°24	27°13	15°26	9°M13	7°M 1	12°35	11°29	24°53	26°15	T 2
F 3	11 18 18	21°27'51	17°54	29°59	9°59	26°46	23°22	27°20	15°24	9°12	6°59	12°30	11°26	25° 0	26°19	F 3
S 4	11 22 14	22°27'25	0°X 4	1°X33	11° 9	27°30	23°21	27°26	15°21	9°11	6°58	12°25	11°23	25° 6	26°22	S 4
S 5	11 26 11	23°26'57	12° 4	3° 7	12°20	28°15	23°20	27°33	15°19	9°10	6°56	12°23	11°20	25°13	26°26	S 5
M 6	11 30 7	24°26'28	23°56	4°43	13°30	28°59	23°19	27°40	15°17	9° 9	6°55	12°D22	11°17	25°20	26°29	M 6
T 7	11 34 4	25°25'57	5°Z46	6°19	14°40	29°43	23°18	27°47	15°14	9° 8	6°53	12°22	11°14	25°26	26°32	T 7
W 8	11 38 0	26°25'23	17°40	7°58	15°51	0°28	23°17	27°54	15°12	9° 7	6°52	12°24	11°10	25°33	26°36	W 8
T 9	11 41 57	27°24'48	29°41	9°37	17° 1	1°12	23°17	28° 1	15° 9	9° 6	6°50	12°25	11° 7	25°40	26°39	T 9
F 10	11 45 53	28°24'12	11°56	11°18	18°12	1°57	23°17	28° 8	15° 7	9° 5	6°49	12°R26	11° 4	25°46	26°42	F 10
S 11	11 49 50	29°23'33	24°27	13° 0	19°22	2°41	23°D17	28°15	15° 5	9° 4	6°47	12°25	11° 1	25°53	26°45	S 11
S 12	11 53 47	0°Y22'52	7°X18	14°44	20°33	3°26	23°17	28°22	15° 2	9° 3	6°46	12°22	10°58	26° 0	26°48	S 12
M13	11 57 43	1°22'09	20°30	16°29	21°44	4°10	23°17	28°29	15° 0	9° 1	6°45	12°17	10°55	26° 6	26°51	M13
T 14	12 1 40	2°21'25	4°Y 1	18°15	22°55	4°55	23°18	28°37	14°57	9° 0	6°43	12°10	10°51	26°13	26°54	T 14
W15	12 5 36	3°20'38	17°51	20° 3	24° 5	5°40	23°18	28°44	14°55	8°59	6°42	12° 2	10°48	26°20	26°57	W15
T 16	12 9 33	4°19'49	1°X54	21°52	25°16	6°24	23°19	28°51	14°52	8°58	6°40	11°53	10°45	26°27	27° 0	T 16
F 17	12 13 29	5°18'58	16° 7	23°42	26°27	7° 9	23°20	28°58	14°50	8°57	6°39	11°45	10°42	26°33	27° 2	F 17
S 18	12 17 26	6°18'05	0°II24	25°34	27°38	7°53	23°22	29° 6	14°47	8°55	6°38	11°39	10°39	26°40	27° 5	S 18
S 19	12 21 22	7°17'09	14°42	27°27	28°49	8°38	23°23	29°13	14°45	8°54	6°36	11°34	10°35	26°47	27° 8	S 19
M20	12 25 19	8°16'12	28°55	29°22	0°X 0	9°22	23°25	29°20	14°42	8°53	6°35	11°32	10°32	26°53	27°10	M20
T 21	12 29 16	9°15'11	13°35 3	1°Y18	1°12	10° 7	23°27	29°28	14°40	8°51	6°34	11°D32	10°29	27° 0	27°13	T 21
W22	12 33 12	10°14'09	27° 5	3°15	2°23	10°52	23°29	29°35	14°37	8°50	6°33	11°33	10°26	27° 7	27°15	W22
T 23	12 37 9	11°13'04	10°Ω58	5°14	3°34	11°36	23°31	29°43	14°34	8°48	6°31	11°R33	10°23	27°13	27°17	T 23
F 24	12 41 5	12°11'56	24°44	7°14	4°45	12°21	23°33	29°50	14°32	8°47	6°30	11°32	10°20	27°20	27°20	F 24
S 25	12 45 2	13°10'47	8°M21	9°15	5°56	13° 6	23°36	29°58	14°29	8°46	6°29	11°29	10°16	27°27	27°22	S 25
S 26	12 48 58	14° 9'35	21°48	11°18	7° 8	13°50	23°39	0°X 5	14°27	8°44	6°28	11°24	10°13	27°33	27°24	S 26
M27	12 52 55	15° 8'21	5°Δ 4	13°22	8°19	14°35	23°42	0°13	14°24	8°43	6°26	11°16	10°10	27°40	27°26	M27
T 28	12 56 51	16° 7'05	18° 7	15°26	9°30	15°19	23°45	0°20	14°22	8°41	6°25	11° 5	10° 7	27°47	27°28	T 28
W29	13 0 48	17° 5'46	0°M57	17°32	10°42	16° 4	23°48	0°28	14°19	8°40	6°24	10°54	10° 4	27°53	27°30	W29
T 30	13 4 45	18° 4'27	13°31	19°38	11°53	16°49	23°52	0°35	14°16	8°38	6°23	10°42	10° 0	28° 0	27°32	T 30
F 31	13 8 41	19°Y 3'05	25°M52	21°Y45	13°X 5	17°33	23°55	0°X43	14°14	8°M37	6°M22	10°31	9°57	28°X 7	27°X34	F 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
W 1	4s11	13s23	4s52	14s29	2s 3	18s 0	0n26	22s 1	0s53	22n 9	0n42	8n21	2s16	5s29	0n41	12s51	1n51	22n21	14n30	17s 3	17s22	27s 9	14s27	6n38					
T 2	3 47	18 13	5 8	14 1	2 6	17 45	0 22	21 53	0 54	22 9	0 42	8 24	2 16	5 28	0 41	12 51	1 52	22 22	14 30	17 5	17 23	27 9	14 26	6 39					
F 3	3 24	22 9	5 9	13 31	2 9	17 31	0 18	21 46	0 55	22 10	0 42	8 27	2 16	5 27	0 41	12 51	1 52	22 22	14 30	17 6	17 24	27 9	14 25	6 39					
S 4	3 0	25 3	4 56	13 0	2 12	17 15	0 14	21 38	0 56	22 10	0 42	8 29	2 16	5 26	0 41	12 50	1 52	22 23	14 30	17 8	17 25	27 8	14 24	6 39					
S 5	2 37	26 46	4 30	12 28	2 14	17 0	0 10	21 30	0 57	22 10	0 41	8 32	2 15	5 25	0 41	12 50	1 52	22 23	14 30	17 8	17 26	27 8	14 23	6 40					
M 6	2 13	27 15	3 53	11 55	2 16	16 43	0 6	21 22	0 58	22 10	0 41	8 34	2 15	5 24	0 41	12 49	1 52	22 24	14 30	17 9	17 27	27 8	14 22	6 40					
T 7	1 49	26 28	3 6	11 20	2 17	16 27	0 2	21 13	0 58	22 10	0 41	8 37	2 15	5 23	0 41	12 49	1 52	22 25	14 30	17 8	17 28	27 7	14 21	6 41					
W 8	1 26	24 29	2 10	10 44	2 18	16 10	0s 2	21 5	0 59	22 11	0 41	8 39	2 15	5 22	0 41	12 49	1 52	22 25	14 30	17 8	17 28	27 7	14 20	6 41					
T 9	1 2	21 23	1 8	10 7	2 18	15 52	0 5	20 56	1 0	22 11	0 41	8 42	2 15	5 22	0 41	12 48	1 52	22 25	14 30	17 8	17 29	27 7	14 19	6 41					
F 10	0 38	17 18	0 3	9 28	2 18	15 34	0 9	20 47	1 1	22 11	0 41	8 45	2 15	5 21	0 41	12 48	1 52	22 26	14 30	17 7	17 30	27 6	14 18	6 42					
S 11	0 15	12 24	1n 5	8 48	2 17	15 15	0 13	20 37	1 2	22 11	0 41	8 47	2 15	5 20	0 41	12 48	1 52	22 26	14 30	17 8	17 31	27 6	14 17	6 42					
S 12	0n 9	6 50	2 10	8 7	2 16	14 56	0 16	20 28	1 3	22 11	0 41	8 50	2 14	5 19	0 41	12 47	1 52	22 27	14 30	17 8	17 32	27 5	14 16	6 43					
M13	0 33	0 52	3 10	7 25	2 15	14 37	0 20	20 18	1 4	22 10	0 41	8 53	2 14	5 18	0 41	12 47	1 52	22 27	14 29	17 10	17 33	27 5	14 15	6 43					
T 14	0 56	5n18	4 1	6 41	2 12	14 17	0 23	20 8	1 5	22 10	0 41	8 55	2 14	5 17	0 41	12 46	1 52	22 28	14 29	17 12	17 34	27 4	14 14	6 44					
W15	1 20	11 19	4 39	5 57	2 10	13 57	0 27	19 58	1 6	22 10	0 41	8 58	2 14	5 16	0 41	12 46	1 52	22 28	14 29	17 14	17 35	27 4	14 13	6 44					
T 16	1 44	16 53	5 1	5 11	2 7	13 36	0 30	19 48	1 7	22 10	0 41	9 1	2 14	5 15	0 41	12 45	1 52	22 29	14 29	17 17	17 35	27 4	14 12	6 44					
F 17	2 7	21 34	5 5	4 24	2 3	13 15	0 33	19 38	1 7	22 10	0 41	9 3	2 14	5 14	0 41	12 45	1 52	22 29	14 29	17 19	17 36	27 3	14 11	6 45					
S 18	2 31	25 1	4 50	3 35	1 59	12 54	0 36	19 27	1 8	22 10	0 41	9 6	2 14	5 13	0 41	12 44	1 52	22 29	14 29	17 21	17 37	27 3	14 10	6 45					
S 19	2 54	26 53	4 17	2 46	1 55	12 32	0 40	19 16	1 9	22 9	0 41	9 9	2 14	5 12	0 41	12 44	1 52	22 30	14 29	17 22	17 38	27 2	14 9	6 46					
M20	3 17	26 58	3 28	1 56	1 49	12 10	0 43	19 5	1 10	22 9	0 41	9 11	2 13	5 11	0 41	12 44	1 52	22 30	14 28	17 22	17 39	27 2	14 8	6 46					
T 21	3 41	25 18	2 26	1 4	1 44	11 48	0 46	18 54	1 11	22 9	0 41	9 14	2 13	5 10	0 41	12 43	1 52	22 30	14 28	17 22	17 40	27 1	14 7	6 47					
W22	4 4	22 4	1 17	0 12	1 38	11 25	0 49	18 43	1 12	22 8	0 41	9 17	2 13	5 9	0 41	12 43	1 52	22 31	14 28	17 22	17 41	27 1	14 7	6 47					
T 23	4 27	17 35	0 3	0n42	1 31	11 2	0 52	18 31	1 13	22 8	0 41	9 20	2 13	5 8	0 41	12 42	1 52	22 31	14 28	17 22	17 41	27 0	14 6	6 48					
F 24	4 50	12 13	1s10	1 36	1 24	10 38	0 54	18 20	1 14	22 7	0 41	9 22	2 13	5 7	0 41	12 42	1 52	22 31	14 28	17 22	17 42	27 0	14 5	6 48					
S 25	5 13	6 20	2 18	2 31	1 16	10 15	0 57	18 8	1 15	22 7	0 41	9 25	2 13	5 6	0 41	12 41	1 52	22 31	14 27	17 23	17 43	26 59	14 4	6 49					
S 26	5 36	0 14	3 17	3 27	1 8	9 51	1 0	17 56	1 15	22 6	0 41	9 28	2 13	5 5	0 41	12 41	1 52	22 32	14 27	17 25	17 44	26 59	14 3	6 49					
M27	5 59	5s46	4 5	4 23	0 59	9 26	1 2	17 43	1 16	22 6	0 41	9 30	2 13	5 4	0 41	12 40	1 52	22 32	14 27	17 27	17 45	26 58	14 2	6 50					
T 28	6 21	11 25	4 39	5 19	0 50	9 2	1 5	17 31	1 17	22 5	0 41	9 33	2 13	5 3	0 41	12 40	1 52	22 32	14 27	17 30	17 46	26 58	14 1	6 50					
W29	6 44	16 29	4 58	6 16	0 41	8 37	1 7	17 19	1 18	22 5	0 41	9 36	2 13	5 2	0 41	12 39	1 53	22 32	14 27	17 33	17 47	26 57	14 0	6 51					
T 30	7 7	20 44	5 2	7 14	0 31	8 32	1 10	17 6	1 19	22 4	0 41	9 39	2 13	5 1	0 41	12 39	1 53	22 33	14 26	17 36	17 47	26 57	14 0	6 51					
F 31	7n29	24s 0	4s52	8n11	0s21	7s46	1s12	16s53	1s20	22n 4	0n41	9n41	2s13	5s 0	0n41	12s38	1n53	22n33	14n26	17s39	17s48	26s56	13s59	6n52					

## ASTRODIENST EPHEMERIS for the year 1469

geocentric

APRIL 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	13 12 38	20°1'41	8°0	23°52	14°16	18°18	23°59	0°51	14°R11	8°R35	6°R21	10°R22	9°54	28°13	27°36	S 1
S 2	13 16 34	21° 0'16	19°57	25°59	15°28	19° 3	24° 3	0°58	14° 9	8°L34	6°M20	10°15	9°51	28°20	27°37	S 2
M 3	13 20 31	21°58'49	1°349	28° 6	16°40	19°47	24° 7	1° 6	14° 6	8°32	6°19	10°11	9°48	28°27	27°39	M 3
T 4	13 24 27	22°57'20	13°38	0°13	17°51	20°32	24°11	1°14	14° 4	8°31	6°18	10° 9	9°45	28°33	27°40	T 4
W 5	13 28 24	23°55'50	25°31	2°19	19° 3	21°17	24°16	1°21	14° 1	8°29	6°17	10°D 9	9°41	28°40	27°42	W 5
T 6	13 32 20	24°54'18	7°332	4°23	20°15	22° 1	24°21	1°29	13°59	8°28	6°16	10°R 9	9°38	28°47	27°43	T 6
F 7	13 36 17	25°52'44	19°47	6°27	21°26	22°46	24°25	1°37	13°56	8°26	6°15	10° 9	9°35	28°53	27°45	F 7
S 8	13 40 14	26°51'09	2°21	8°28	22°38	23°31	24°30	1°44	13°54	8°24	6°14	10° 7	9°32	29° 0	27°46	S 8
S 9	13 44 10	27°49'32	15°18	10°28	23°50	24°15	24°35	1°52	13°51	8°23	6°13	10° 3	9°29	29° 7	27°47	S 9
M10	13 48 7	28°47'53	28°40	12°25	25° 2	25° 0	24°41	2° 0	13°49	8°21	6°12	9°56	9°26	29°14	27°48	M10
T 11	13 52 3	29°46'13	12°Y27	14°19	26°14	25°45	24°46	2° 8	13°46	8°20	6°12	9°47	9°22	29°20	27°49	T 11
W12	13 56 0	0°344'31	26°38	16°11	27°26	26°29	24°52	2°15	13°44	8°18	6°11	9°36	9°19	29°27	27°50	W12
T 13	13 59 56	1°42'47	11°8 6	17°59	28°37	27°14	24°57	2°23	13°41	8°16	6°10	9°24	9°16	29°34	27°51	T 13
F 14	14 3 53	2°41'01	25°46	19°44	29°49	27°58	25° 3	2°31	13°39	8°15	6° 9	9°13	9°13	29°40	27°52	F 14
S 15	14 7 49	3°39'14	10°II29	21°26	1°Y 1	28°43	25° 9	2°39	13°37	8°13	6° 9	9° 4	9°10	29°47	27°52	S 15
S 16	14 11 46	4°37'25	25° 7	23° 4	2°13	29°28	25°16	2°46	13°34	8°11	6° 8	8°58	9° 6	29°54	27°53	S 16
M17	14 15 42	5°35'33	9°37	24°39	3°25	0°X12	25°22	2°54	13°32	8°10	6° 7	8°54	9° 3	0°3 0	27°54	M17
T 18	14 19 39	6°33'40	23°52	26°10	4°37	0°57	25°28	3° 2	13°30	8° 8	6° 7	8°52	9° 0	0° 7	27°54	T 18
W19	14 23 36	7°31'45	7°L33	27°36	5°49	1°41	25°35	3° 9	13°27	8° 7	6° 6	8°52	8°57	0°14	27°55	W19
T 20	14 27 32	8°29'47	21°38	28°59	7° 1	2°26	25°42	3°17	13°25	8° 5	6° 6	8°52	8°54	0°20	27°55	T 20
F 21	14 31 29	9°27'48	5°M 9	0°II17	8°13	3°10	25°49	3°25	13°23	8° 3	6° 5	8°50	8°51	0°27	27°55	F 21
S 22	14 35 25	10°25'46	18°27	1°32	9°25	3°54	25°56	3°33	13°21	8° 2	6° 5	8°47	8°47	0°34	27°56	S 22
S 23	14 39 22	11°23'43	1°L33	2°42	10°37	4°39	26° 3	3°40	13°18	8° 0	6° 4	8°40	8°44	0°40	27°56	S 23
M24	14 43 18	12°21'38	14°27	3°48	11°50	5°23	26°10	3°48	13°16	7°58	6° 4	8°31	8°41	0°47	27°56	M24
T 25	14 47 15	13°19'32	27°11	4°49	13° 2	6° 8	26°18	3°56	13°14	7°57	6° 3	8°19	8°38	0°54	27°56	T 25
W26	14 51 11	14°17'23	9°M43	5°46	14°14	6°52	26°25	4° 3	13°12	7°55	6° 3	8° 6	8°35	1° 0	27°56	W26
T 27	14 55 8	15°15'14	22° 4	6°39	15°26	7°36	26°33	4°11	13°10	7°54	6° 2	7°53	8°32	1° 7	27°56	T 27
F 28	14 59 5	16°13'03	4°L15	7°27	16°38	8°21	26°41	4°18	13° 8	7°52	6° 2	7°40	8°28	1°14	27°55	F 28
S 29	15 3 1	17°10'50	16°17	8°10	17°50	9° 5	26°49	4°26	13° 6	7°50	6° 2	7°30	8°25	1°20	27°55	S 29
S 30	15 6 58	18°8'36	28°L11	8°II49	19°Y 3	9°X49	26°57	4°34	13° 4	7°M49	6°M 2	7°22	8°22	1°327	27°55	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	decl	lat
S 1	7n51	26s 7	4s28	9n 8	0s10	7s21	1s14	16s40	1s21	22n 3	0n41	9n44	2s12	4s59	0n41	12s38	1n53	22n33	14n26	17s42	17s49	26s55	13s58	6n52			
S 2	8 13	27 1	3 54	10 4	0n 0	6 55	1 16	16 27	1 22	22 2	0 41	9 47	2 12	4 58	0 41	12 37	1 53	22 33	14 26	17 43	17 50	26 55	13 57	6 53			
M 3	8 35	26 39	3 9	11 0	0 11	6 29	1 18	16 14	1 23	22 1	0 41	9 49	2 12	4 57	0 41	12 37	1 53	22 33	14 25	17 45	17 51	26 54	13 56	6 53			
T 4	8 57	25 4	2 16	11 55	0 22	6 3	1 20	16 0	1 23	22 1	0 41	9 52	2 12	4 56	0 41	12 36	1 53	22 33	14 25	17 45	17 52	26 54	13 55	6 54			
W 5	9 19	22 22	1 17	12 50	0 33	5 36	1 22	15 47	1 24	22 0	0 41	9 55	2 12	4 55	0 41	12 36	1 53	22 34	14 25	17 45	17 53	26 53	13 55	6 54			
T 6	9 40	18 40	0 14	13 42	0 44	5 10	1 24	15 33	1 25	21 59	0 41	9 57	2 12	4 54	0 41	12 35	1 53	22 34	14 25	17 45	17 53	26 53	13 54	6 55			
F 7	10 2	14 7	0n51	14 34	0 55	4 43	1 26	15 19	1 26	21 58	0 41	10 0	2 12	4 53	0 41	12 35	1 53	22 34	14 24	17 45	17 54	26 52	13 53	6 55			
S 8	10 23	8 53	1 55	15 24	1 5	4 16	1 28	15 5	1 27	21 57	0 41	10 3	2 12	4 52	0 41	12 34	1 53	22 34	14 24	17 46	17 55	26 51	13 52	6 56			
S 9	10 44	3 8	2 55	16 12	1 15	3 49	1 29	14 51	1 28	21 56	0 41	10 6	2 12	4 51	0 41	12 34	1 53	22 34	14 24	17 47	17 56	26 51	13 52	6 56			
M10	11 5	2n56	3 47	16 58	1 25	3 22	1 31	14 37	1 29	21 55	0 41	10 8	2 12	4 50	0 41	12 33	1 53	22 34	14 23	17 49	17 57	26 50	13 51	6 57			
T 11	11 25	9 2	4 28	17 41	1 35	2 55	1 32	14 23	1 30	21 54	0 41	10 11	2 12	4 49	0 41	12 33	1 53	22 34	14 23	17 51	17 58	26 49	13 50	6 57			
W12	11 46	14 51	4 53	18 23	1 44	2 27	1 33	14 8	1 30	21 53	0 41	10 14	2 12	4 48	0 41	12 32	1 53	22 34	14 23	17 54	17 59	26 49	13 50	6 58			
T 13	12 6	19 57	5 0	19 2	1 52	2 0	1 35	13 54	1 31	21 52	0 41	10 16	2 12	4 48	0 41	12 32	1 53	22 34	14 22	17 57	17 59	26 48	13 49	6 58			
F 14	12 26	23 55	4 48	19 39	2 0	1 32	1 36	13 39	1 32	21 51	0 41	10 19	2 12	4 47	0 41	12 31	1 53	22 34	14 22	18 0	18 0	26 47	13 48	6 59			
S 15	12 46	26 19	4 17	20 13	2 7	1 4	1 37	13 24	1 33	21 50	0 41	10 22	2 12	4 46	0 41	12 30	1 53	22 34	14 22	18 2	18 1	26 47	13 48	6 59			
S 16	13 6	26 54	3 29	20 44	2 13	0 37	1 38	13 9	1 34	21 49	0 41	10 24	2 12	4 45	0 41	12 30	1 53	22 34	14 22	18 4	18 2	26 46	13 47	7 0			
M17	13 26	25 37	2 28	21 14	2 19	0 9	1 39	12 54	1 35	21 48	0 41	10 27	2 12	4 44	0 41	12 29	1 53	22 34	14 21	18 5	18 3	26 45	13 46	7 0			
T 18	13 45	22 41	1 18	21 40	2 23	0n19	1 40	12 39	1 35	21 46	0 41	10 30	2 12	4 43	0 41	12 29	1 53	22 34	14 21	18 6	18 4	26 45	13 46	7 1			
W19	14 4	18 26	0 5	22 4	2 27	0 47	1 41	12 24	1 36	21 45	0 41	10 32	2 12	4 42	0 41	12 28	1 53	22 34	14 21	18 6	18 4	26 44	13 45	7 2			
T 20	14 23	13 17	1s 7	22 26	2 30	1 15	1 41	12 9	1 37	21 44	0 41	10 35	2 12	4 41	0 41	12 28	1 53	22 34	14 20	18 6	18 5	26 43	13 44	7 2			
F 21	14 41	7 34	2 14	22 45	2 33	1 43	1 42	11 54	1 38	21 42	0 40	10 37	2 12	4 40	0 41	12 27	1 53	22 34	14 20	18 6	18 6	26 43	13 44	7 3			
S 22	15 0	1 38	3 13	23 2	2 34	2 11	1 42	11 38	1 39	21 41	0 40	10 40	2 12	4 40	0 41	12 27	1 53	22 34	14 20	18 7	18 7	26 42	13 43	7 3			
S 23	15 18	4s17	4 0	23 17	2 34	2 39	1 43	11 23	1 40	21 40	0 40	10 43	2 12	4 39	0 41	12 26	1 53	22 33	14 19	18 9	18 8	26 41	13 43	7 4			
M24	15 35	9 56	4 34	23 29	2 33	3 6	1 43	11 7	1 40	21 38	0 40	10 45	2 12	4 38	0 40	12 26	1 53	22 33	14 19	18 11	18 9	26 40	13 42	7 4			
T 25	15 53	15 4	4 54	23 39	2 32	3 34	1 43	10 51	1 41	21 37	0 40	10 48	2 12	4 37	0 40	12 25	1 53	22 33	14 18	18 14	18 9	26 40	13 42	7 5			
W26	16 10	19 30	5 0	23 47	2 29	4 2	1 44	10 36	1 42	21 36	0 40	10 50	2 12	4 36	0 40	12 25	1 53	22 33	14 18	18 18	18 10	26 39	13 41	7 5			
T 27	16 27	23 1	4 51	23 53	2 26	4 30	1 44	10 20	1 43	21 34	0 40	10 53	2 12	4 36	0 40	12 24	1 53	22 33	14 18	18 21	18 11	26 38	13 41	7 6			
F 28	16 44	25 28	4 29	23 56	2 21	4 58	1 44	10 4	1 43	21 32	0 40	10 55	2 12	4 35	0 40	12 24	1 53	22 33	14 17	18 24	18 12	26 37	13 40	7 6			
S 29	17 1	26 42	3 55	23 58	2 16	5 25	1 44	9 48	1 44	21 31	0 40	10 58	2 12	4 34	0 40	12 23	1 53	22 32	14 17	18 27	18 13	26 37	13 40	7 7			
S 30	17n17	26s41	3s11	23n57	2n 9	5n53	1s44	9s32	1s45	21n29	0n40	11n 0	2s12	4s33	0n40	12s23	1n53	22n32	14n17	18s29	18s14	26s36	13s39	7n			

## ASTRODIENST EPHEMERIS for the year 1469

geocentric

MAY 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	15 10 54	19♌ 6'21	10♋ 0	9♏23	20♑15	10♊33	27♉ 5	4♉41	13°R 2	7°R47	6°R 1	7°R16	8♏19	1♋34	27°R54	M 1
T 2	15 14 51	20° 4'05	21°48	9°52	21°27	11°18	27°13	4°49	13♌ 0	7♏46	6♏1	7♏13	8°16	1°40	27♋54	T 2
W 3	15 18 47	21° 1'47	3♏40	10°17	22°39	12° 2	27°22	4°56	12°58	7°44	6° 1	7°D13	8°12	1°47	27°53	W 3
T 4	15 22 44	21°59'29	15°40	10°36	23°52	12°46	27°30	5° 4	12°57	7°42	6° 1	7°13	8° 9	1°54	27°53	T 4
F 5	15 26 41	22°57'09	27°53	10°51	25° 4	13°30	27°39	5°11	12°55	7°41	6° 1	7°R13	8° 6	2° 0	27°52	F 5
S 6	15 30 37	23°54'48	10♊26	11° 1	26°16	14°14	27°48	5°19	12°53	7°39	6° 1	7°11	8° 3	2° 7	27°51	S 6
S 7	15 34 34	24°52'26	23°22	11° 6	27°29	14°58	27°56	5°26	12°51	7°38	6° 1	7° 8	8° 0	2°14	27°50	S 7
M 8	15 38 30	25°50'04	6♑46	11°R 7	28°41	15°42	28° 5	5°34	12°50	7°36	6°D 1	7° 3	7°57	2°20	27°49	M 8
T 9	15 42 27	26°47'40	20°38	11° 3	29°54	16°26	28°14	5°41	12°48	7°35	6° 1	6°55	7°53	2°27	27°48	T 9
W10	15 46 23	27°45'15	4♉57	10°54	1♌ 6	17°10	28°24	5°49	12°46	7°33	6° 1	6°46	7°50	2°34	27°47	W10
T 11	15 50 20	28°42'49	19°39	10°41	2°18	17°54	28°33	5°56	12°45	7°32	6° 1	6°36	7°47	2°40	27°46	T 11
F 12	15 54 16	29°40'23	4♏37	10°25	3°31	18°38	28°42	6° 3	12°43	7°30	6° 1	6°26	7°44	2°47	27°45	F 12
S 13	15 58 13	0♏37'55	19°41	10° 4	4°43	19°22	28°52	6°11	12°42	7°29	6° 1	6°18	7°41	2°54	27°44	S 13
S 14	16 2 10	1°35'26	4♉41	9°41	5°56	20° 5	29° 1	6°18	12°41	7°27	6° 1	6°12	7°38	3° 0	27°42	S 14
M15	16 6 6	2°32'56	19°29	9°14	7° 8	20°49	29°11	6°25	12°39	7°26	6° 1	6° 9	7°34	3° 7	27°41	M15
T 16	16 10 3	3°30'24	4♏ 0	8°45	8°21	21°33	29°21	6°32	12°38	7°24	6° 1	6°D 8	7°31	3°14	27°40	T 16
W17	16 13 59	4°27'51	18°10	8°14	9°33	22°16	29°31	6°39	12°37	7°23	6° 2	6° 8	7°28	3°20	27°38	W17
T 18	16 17 56	5°25'17	1♏58	7°42	10°46	23° 0	29°41	6°47	12°35	7°22	6° 2	6°R 9	7°25	3°27	27°36	T 18
F 19	16 21 52	6°22'41	15°26	7° 8	11°58	23°43	29°51	6°54	12°34	7°20	6° 2	6° 9	7°22	3°34	27°35	F 19
S 20	16 25 49	7°20'04	28°36	6°35	13°11	24°26	0♏ 1	7° 1	12°33	7°19	6° 3	6° 6	7°18	3°40	27°33	S 20
S 21	16 29 45	8°17'27	11♌29	6° 1	14°24	25°10	0°11	7° 8	12°32	7°17	6° 3	6° 2	7°15	3°47	27°31	S 21
M22	16 33 42	9°14'48	24° 8	5°29	15°36	25°53	0°22	7°15	12°31	7°16	6° 3	5°56	7°12	3°54	27°29	M22
T 23	16 37 39	10°12'08	6♏35	4°58	16°49	26°36	0°32	7°22	12°30	7°15	6° 4	5°47	7° 9	4° 0	27°27	T 23
W24	16 41 35	11° 9'27	18°53	4°29	18° 1	27°19	0°43	7°29	12°29	7°14	6° 4	5°37	7° 6	4° 7	27°26	W24
T 25	16 45 32	12° 6'45	1♌ 1	4° 2	19°14	28° 2	0°53	7°35	12°28	7°12	6° 5	5°27	7° 3	4°14	27°24	T 25
F 26	16 49 28	13° 4'03	13° 2	3°38	20°27	28°45	1° 4	7°42	12°27	7°11	6° 5	5°18	6°59	4°20	27°21	F 26
S 27	16 53 25	14° 1'20	24°56	3°18	21°39	29°28	1°15	7°49	12°26	7°10	6° 6	5°10	6°56	4°27	27°19	S 27
S 28	16 57 21	14°58'36	6♋46	3° 1	22°52	0♑11	1°25	7°56	12°26	7° 9	6° 7	5° 4	6°53	4°34	27°17	S 28
M29	17 1 18	15°55'52	18°35	2°48	24° 5	0°54	1°36	8° 2	12°25	7° 7	6° 7	5° 1	6°50	4°40	27°15	M29
T 30	17 5 14	16°53'07	0♏23	2°39	25°18	1°37	1°47	8° 9	12°24	7° 6	6° 8	4°D59	6°47	4°47	27°13	T 30
W31	17 9 11	17°50'22	12♏16	2♏34	26♌30	2°19	1°58	8♌16	12♌24	7♏ 5	6♏ 9	4♏59	6♏44	4♋54	27♋10	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
M 1	17n33	25s26	2s19	23n55	2n 1	6n20	1s44	9s16	1s46	21n28	0n40	11n 3	2s12	4s33	0n40	12s22	1n53	22n32	14n16	18s30	18s14	26s35	13s39	7n 8			
T 2	17 49	23 4	1 21	23 51	1 53	6 48	1 43	9 0	1 47	21 26	0 40	11 5	2 12	4 32	0 40	12 22	1 53	22 32	14 16	18 31	18 15	26 34	13 39	7 8			
W 3	18 4	19 42	0 19	23 45	1 43	7 15	1 43	8 43	1 47	21 24	0 40	11 8	2 12	4 31	0 40	12 21	1 53	22 31	14 16	18 31	18 16	26 33	13 38	7 9			
T 4	18 19	15 29	0n45	23 38	1 32	7 42	1 43	8 27	1 48	21 23	0 40	11 10	2 12	4 31	0 40	12 21	1 53	22 31	14 15	18 31	18 17	26 33	13 38	7 9			
F 5	18 34	10 34	1 48	23 28	1 21	8 9	1 42	8 11	1 49	21 21	0 40	11 13	2 12	4 30	0 40	12 20	1 53	22 31	14 15	18 31	18 18	26 32	13 38	7 10			
S 6	18 48	5 6	2 47	23 17	1 8	8 36	1 42	7 54	1 50	21 19	0 40	11 15	2 12	4 29	0 40	12 20	1 53	22 30	14 15	18 32	18 19	26 31	13 37	7 10			
S 7	19 3	0n43	3 39	23 5	0 55	9 2	1 41	7 38	1 50	21 17	0 40	11 18	2 12	4 29	0 40	12 19	1 53	22 30	14 14	18 32	18 19	26 30	13 37	7 11			
M 8	19 16	6 42	4 22	22 51	0 41	9 29	1 40	7 21	1 51	21 16	0 40	11 20	2 12	4 28	0 40	12 19	1 53	22 30	14 14	18 34	18 20	26 29	13 37	7 11			
T 9	19 30	12 34	4 51	22 35	0 26	9 55	1 40	7 5	1 52	21 14	0 40	11 23	2 12	4 27	0 40	12 18	1 53	22 29	14 13	18 36	18 21	26 29	13 36	7 12			
W10	19 43	17 57	5 2	22 19	0 10	10 21	1 39	6 48	1 52	21 12	0 40	11 25	2 12	4 27	0 40	12 18	1 53	22 29	14 13	18 38	18 22	26 28	13 36	7 12			
T 11	19 56	22 26	4 55	22 1	0s 6	10 47	1 38	6 32	1 53	21 10	0 40	11 27	2 12	4 26	0 40	12 17	1 53	22 29	14 13	18 41	18 23	26 27	13 36	7 13			
F 12	20 8	25 30	4 27	21 42	0 23	11 12	1 37	6 15	1 54	21 8	0 40	11 30	2 12	4 26	0 40	12 17	1 53	22 28	14 12	18 43	18 23	26 26	13 36	7 13			
S 13	20 21	26 47	3 41	21 22	0 40	11 38	1 36	5 59	1 54	21 6	0 40	11 32	2 13	4 25	0 40	12 16	1 53	22 28	14 12	18 45	18 24	26 25	13 35	7 14			
S 14	20 32	26 5	2 39	21 1	0 57	12 3	1 35	5 42	1 55	21 4	0 40	11 34	2 13	4 25	0 40	12 16	1 52	22 28	14 12	18 47	18 25	26 24	13 35	7 14			
M15	20 44	23 32	1 28	20 40	1 15	12 28	1 34	5 25	1 56	21 2	0 40	11 37	2 13	4 24	0 40	12 16	1 52	22 27	14 11	18 47	18 26	26 23	13 35	7 15			
T 16	20 55	19 30	0 11	20 19	1 32	12 52	1 32	5 9	1 57	21 0	0 40	11 39	2 13	4 24	0 40	12 15	1 52	22 27	14 11	18 48	18 27	26 22	13 35	7 15			
W17	21 6	14 25	1s 4	19 57	1 49	13 17	1 31	4 52	1 57	20 58	0 40	11 41	2 13	4 23	0 40	12 15	1 52	22 26	14 10	18 48	18 27	26 21	13 35	7 15			
T 18	21 16	8 44	2 14	19 35	2 6	13 41	1 30	4 35	1 58	20 56	0 40	11 43	2 13	4 23	0 40	12 14	1 52	22 26	14 10	18 47	18 28	26 21	13 34	7 16			
F 19	21 26	2 47	3 14	19 14	2 22	14 4	1 28	4 19	1 58	20 54	0 40	11 46	2 13	4 22	0 40	12 14	1 52	22 25	14 10	18 48	18 29	26 20	13 34	7 16			
S 20	21 36	3s 9	4 3	18 53	2 38	14 28	1 27	4 2	1 59	20 52	0 40	11 48	2 13	4 22	0 40	12 13	1 52	22 25	14 9	18 48	18 30	26 19	13 34	7 17			
S 21	21 45	8 49	4 38	18 33	2 53	14 51	1 25	3 45	2 0	20 49	0 40	11 50	2 13	4 21	0 40	12 13	1 52	22 24	14 9	18 49	18 31	26 18	13 34	7 17			
M22	21 54	14 1	4 59	18 13	3 6	15 13	1 24	3 29	2 0	20 47	0 40	11 52	2 13	4 21	0 40	12 13	1 52	22 24	14 9	18 51	18 32	26 17	13 34	7 18			
T 23	22 3	18 33	5 5	17 55	3 19	15 36	1 22	3 12	2 1	20 45	0 40	11 54	2 13	4 21	0 40	12 12	1 52	22 23	14 8	18 53	18 32	26 16	13 34	7 18			
W24	22 11	22 15	4 57	17 39	3 31	15 58	1 21	2 55	2 1	20 43	0 40	11 57	2 13	4 20	0 40	12 12	1 52	22 23	14 8	18 55	18 33	26 15	13 34	7 18			
T 25	22 19	24 55	4 36	17 24	3 41	16 19	1 19	2 39	2 2	20 40	0 40	11 59	2 14	4 20	0 40	12 11	1 52	22 22	14 7	18 58	18 34	26 14	13 34	7 19			
F 26	22 26	26 26	4 2	17 11	3 50	16 40	1 17	2 22	2 3	20 38	0 40	12 1	2 14	4 20	0 39	12 11	1 52	22 22	14 7	19 0	18 35	26 13	13 34	7 19			
S 27	22 33	26 43	3 18	16 59	3 58	17 1	1 15	2 6	2 3	20 36	0 40	12 3	2 14	4 19	0 39	12 11	1 52	22 21	14 7	19 2	18 36	26 12	13 34	7 20			
S 28	22 40	25 46	2 26	16 50	4 4	17 21	1 14	1 49	2 4	20 33	0 40	12 5	2 14	4 19	0 39	12 10	1 52	22 21	14 6	19 3	18 36	26 11	13 34	7 20			
M29	22 46	23 40	1 27	16 42	4 9	17 41	1 12	1 32	2 4	20 31	0 40	12 7	2 14	4 19	0 39	12 10	1 52	22 20	14 6	19 4	18 37	26 10	13 34	7 20			
T 30	22 52	20 32	0 25	16 37	4 13	18 1	1 10	1 16	2 5	20 28	0 40	12 9	2 14	4 19	0 39	12 10	1 52	22 19	14 6	19 5	18 38	26 9	13 34	7 21			
W31	22n57	16s32	0n39	16n33	4s16	18n20	1s 8	0s59	2s 5	20n26	0n40	12n11	2s14	4s19	0n39	12s 9	1n52	22n19	14n 5	19s 4	18s39	26s 8	13s34	7n21			



## ASTRODIENST EPHEMERIS for the year 1469

geocentric

JUNE 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 13 8	18II47'36	24II17	2°D34	27II43	3V 2	2II10	8II22	12°R23	7°R 4	6II 9	5II 1	6II40	5II 0	27°R 8	T 1
F 2	17 17 4	19°44'50	6II31	2II39	28°56	3°45	2°21	8°29	12II23	7II 3	6°10	5° 2	6°37	5° 7	27II 5	F 2
S 3	17 21 1	20°42'04	19° 2	2°48	0II 9	4°27	2°32	8°35	12°22	7° 2	6°11	5°R 3	6°34	5°14	27° 3	S 3
S 4	17 24 57	21°39'18	1V56	3° 2	1°22	5° 9	2°43	8°41	12°22	7° 1	6°12	5° 2	6°31	5°20	27° 0	S 4
M 5	17 28 54	22°36'32	15°15	3°20	2°34	5°52	2°55	8°48	12°21	7° 0	6°12	5° 0	6°28	5°27	26°58	M 5
T 6	17 32 50	23°33'45	29° 3	3°43	3°47	6°34	3° 6	8°54	12°21	6°59	6°13	4°56	6°24	5°34	26°55	T 6
W 7	17 36 47	24°30'59	13II19	4°11	5° 0	7°16	3°18	9° 0	12°21	6°58	6°14	4°51	6°21	5°40	26°52	W 7
T 8	17 40 43	25°28'12	28° 1	4°43	6°13	7°58	3°29	9° 6	12°21	6°57	6°15	4°45	6°18	5°47	26°50	T 8
F 9	17 44 40	26°25'25	13II 2	5°20	7°26	8°40	3°41	9°13	12°21	6°56	6°16	4°40	6°15	5°54	26°47	F 9
S 10	17 48 37	27°22'39	28°13	6° 1	8°39	9°22	3°53	9°19	12°20	6°55	6°17	4°35	6°12	6° 0	26°44	S 10
S 11	17 52 33	28°19'52	13II25	6°47	9°52	10° 4	4° 4	9°25	12°D20	6°54	6°18	4°32	6° 9	6° 7	26°41	S 11
M12	17 56 30	29°17'04	28°28	7°37	11° 5	10°45	4°16	9°31	12°20	6°53	6°19	4°D31	6° 5	6°14	26°38	M12
T 13	18 0 26	0II14'17	13II14	8°31	12°18	11°27	4°28	9°36	12°20	6°52	6°20	4°31	6° 2	6°20	26°35	T 13
W14	18 4 23	1°11'29	27°37	9°30	13°31	12° 8	4°40	9°42	12°21	6°51	6°21	4°32	5°59	6°27	26°32	W14
T 15	18 8 19	2° 8'40	11II35	10°33	14°44	12°49	4°52	9°48	12°21	6°51	6°22	4°33	5°56	6°34	26°29	T 15
F 16	18 12 16	3° 5'51	25° 9	11°40	15°57	13°30	5° 4	9°54	12°21	6°50	6°23	4°34	5°53	6°40	26°26	F 16
S 17	18 16 12	4° 3'02	8II19	12°50	17°10	14°12	5°16	9°59	12°21	6°49	6°25	4°R34	5°50	6°47	26°23	S 17
S 18	18 20 9	5° 0'13	21° 8	14° 5	18°24	14°52	5°28	10° 5	12°22	6°49	6°26	4°33	5°46	6°54	26°20	S 18
M19	18 24 6	5°57'23	3II40	15°24	19°37	15°33	5°41	10°10	12°22	6°48	6°27	4°31	5°43	7° 0	26°17	M19
T 20	18 28 2	6°54'33	15°58	16°47	20°50	16°14	5°53	10°16	12°22	6°47	6°28	4°28	5°40	7° 7	26°14	T 20
W21	18 31 59	7°51'43	28° 5	18°14	22° 3	16°55	6° 5	10°21	12°23	6°47	6°29	4°23	5°37	7°14	26°11	W21
T 22	18 35 55	8°48'53	10II 4	19°44	23°16	17°35	6°17	10°26	12°23	6°46	6°31	4°19	5°34	7°20	26° 7	T 22
F 23	18 39 52	9°46'04	21°57	21°19	24°29	18°15	6°30	10°31	12°24	6°46	6°32	4°15	5°30	7°27	26° 4	F 23
S 24	18 43 48	10°43'14	3II47	22°56	25°43	18°56	6°42	10°37	12°25	6°45	6°33	4°12	5°27	7°34	26° 1	S 24
S 25	18 47 45	11°40'25	15°36	24°38	26°56	19°36	6°55	10°42	12°25	6°45	6°35	4°10	5°24	7°40	25°57	S 25
M26	18 51 42	12°37'35	27°26	26°22	28° 9	20°16	7° 7	10°47	12°26	6°44	6°36	4° 8	5°21	7°47	25°54	M26
T 27	18 55 38	13°34'47	9II18	28°10	29°23	20°56	7°20	10°52	12°27	6°44	6°38	4°D 8	5°18	7°54	25°51	T 27
W28	18 59 35	14°31'58	21°17	0II 1	0II36	21°35	7°32	10°56	12°28	6°43	6°39	4° 9	5°15	8° 0	25°47	W28
T 29	19 3 31	15°29'10	3II24	1°55	1°49	22°15	7°45	11° 1	12°29	6°43	6°40	4°10	5°11	8° 7	25°44	T 29
F 30	19 7 28	16°26'23	15II43	3II52	3II 3	22°V54	7II57	11II 6	12II30	6II43	6II42	4II12	5II 8	8II14	25II41	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	23n 2	11s51	1n43	16n32	4s17	18n39	1s 6	0s43	2s 6	20n23	0n40	12n13	2s14	4s18	0n39	T 1
F 2	23 7	6 38	2 42	16 33	4 17	18 57	1 4	0 26	2 6	20 21	0 40	12 15	2 14	4 18	0 39	F 2
S 3	23 11	1 2	3 36	16 36	4 16	19 14	1 2	0 10	2 7	20 18	0 40	12 17	2 15	4 18	0 39	S 3
S 4	23 15	4n45	4 20	16 41	4 14	19 31	0 59	0n 6	2 7	20 16	0 40	12 19	2 15	4 18	0 39	S 4
M 5	23 18	10 31	4 52	16 47	4 10	19 48	0 57	0 23	2 8	20 13	0 40	12 21	2 15	4 18	0 39	M 5
T 6	23 21	15 58	5 9	16 56	4 6	20 4	0 55	0 39	2 8	20 10	0 40	12 23	2 15	4 18	0 39	T 6
W 7	23 24	20 45	5 7	17 6	4 1	20 20	0 53	0 55	2 9	20 8	0 40	12 24	2 15	4 18	0 39	W 7
T 8	23 26	24 24	4 45	17 18	3 55	20 35	0 51	1 12	2 9	20 5	0 40	12 26	2 15	4 18	0 39	T 8
F 9	23 28	26 28	4 4	17 31	3 48	20 49	0 48	1 28	2 10	20 2	0 40	12 28	2 15	4 18	0 39	F 9
S 10	23 29	26 35	3 5	17 46	3 40	21 3	0 46	1 44	2 10	20 0	0 40	12 30	2 15	4 18	0 39	S 10
S 11	23 30	24 42	1 52	18 2	3 32	21 17	0 44	2 0	2 10	19 57	0 40	12 32	2 16	4 18	0 39	S 11
M12	23 30	21 4	0 33	18 19	3 22	21 29	0 41	2 16	2 11	19 54	0 40	12 33	2 16	4 18	0 39	M12
T 13	23 31	16 8	0s48	18 37	3 13	21 42	0 39	2 32	2 11	19 51	0 40	12 35	2 16	4 18	0 39	T 13
W14	23 30	10 25	2 3	18 56	3 3	21 53	0 36	2 47	2 12	19 48	0 40	12 37	2 16	4 18	0 39	W14
T 15	23 30	4 19	3 9	19 16	2 52	22 4	0 34	3 3	2 12	19 45	0 40	12 38	2 16	4 18	0 39	T 15
F 16	23 28	1s46	4 2	19 36	2 41	22 15	0 32	3 19	2 12	19 43	0 40	12 40	2 16	4 18	0 39	F 16
S 17	23 27	7 36	4 41	19 56	2 29	22 24	0 29	3 34	2 13	19 40	0 40	12 42	2 17	4 18	0 39	S 17
S 18	23 25	12 58	5 5	20 17	2 17	22 33	0 27	3 50	2 13	19 37	0 40	12 43	2 17	4 18	0 39	S 18
M19	23 22	17 41	5 13	20 38	2 5	22 42	0 24	4 5	2 13	19 34	0 40	12 45	2 17	4 19	0 39	M19
T 20	23 20	21 33	5 7	20 59	1 53	22 50	0 22	4 21	2 14	19 31	0 41	12 46	2 17	4 19	0 38	T 20
W21	23 17	24 17	4 47	21 20	1 40	22 57	0 19	4 36	2 14	19 28	0 41	12 48	2 17	4 19	0 38	W21
T 22	23 13	26 13	4 15	21 40	1 27	23 4	0 17	4 51	2 14	19 25	0 41	12 49	2 17	4 19	0 38	T 22
F 23	23 9	26 47	3 32	21 59	1 14	23 9	0 14	5 6	2 14	19 22	0 41	12 51	2 18	4 20	0 38	F 23
S 24	23 5	26 7	2 39	22 18	1 1	23 15	0 12	5 21	2 15	19 18	0 41	12 52	2 18	4 20	0 38	S 24
S 25	23 0	24 15	1 40	22 35	0 49	23 19	0 9	5 36	2 15	19 15	0 41	12 54	2 18	4 20	0 38	S 25
M26	22 54	21 20	0 37	22 52	0 36	23 23	0 7	5 51	2 15	19 12	0 41	12 55	2 18	4 20	0 38	M26
T 27	22 49	17 31	0n29	23 6	0 24	23 26	0 4	6 6	2 15	19 9	0 41	12 56	2 18	4 21	0 38	T 27
W28	22 43	12 59	1 33	23 19	0 11	23 29	0 2	6 21	2 16	19 6	0 41	12 58	2 18	4 21	0 38	W28
T 29	22 36	7 53	2 35	23 30	0n 1	23 30	0n 1	6 35	2 16	19 3	0 41	12 59	2 19	4 22	0 38	T 29
F 30	22n30	2s25	3n30	23n39	0n12	23n32	0n 3	6n50	2s16	18n59	0n41	13n 0	2s19	4s22	0n38	F 30

Julian Day Number = 2257761.5, Delta T = 05m53s

Ecliptic obliquity = 23°30'35", Nutation = 0°00'13", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°20'16", Lahiri = 16°27'16" Julian Calendar 1 June 1469 == Greg. Calendar 10 June 1469

# ASTRODIENST EPHEMERIS for the year 1469

## geocentric

JULY 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	19 11 24	17°23'36	28°18	5°51	4°16	23°33	8°10	11°10	12°31	6°R42	6°43	4°13	5° 5	8°20	25°R37	S 1
S 2	19 15 21	18°20'50	11°11	7°52	5°30	24°13	8°23	11°15	12°32	6°L42	6°45	4°14	5° 2	8°27	25°34	S 2
M 3	19 19 17	19°18'05	24°27	9°55	6°43	24°52	8°36	11°19	12°33	6°42	6°46	4°R14	4°59	8°34	25°30	M 3
T 4	19 23 14	20°15'20	8°8	11°59	7°57	25°30	8°48	11°24	12°34	6°42	6°48	4°13	4°55	8°40	25°27	T 4
W 5	19 27 11	21°12'37	22°14	14° 5	9°10	26° 9	9° 1	11°28	12°35	6°41	6°50	4°12	4°52	8°47	25°24	W 5
T 6	19 31 7	22° 9'54	6°11	16°11	10°24	26°47	9°14	11°32	12°37	6°41	6°51	4°11	4°49	8°54	25°20	T 6
F 7	19 35 4	23° 7'13	21°34	18°18	11°37	27°26	9°27	11°36	12°38	6°41	6°53	4° 9	4°46	9° 0	25°17	F 7
S 8	19 39 0	24° 4'32	6°38	20°25	12°51	28° 4	9°40	11°40	12°39	6°41	6°54	4° 8	4°43	9° 7	25°13	S 8
S 9	19 42 57	25° 1'52	21°47	22°33	14° 5	28°42	9°53	11°44	12°41	6°41	6°56	4° 8	4°40	9°14	25°10	S 9
M10	19 46 53	25°59'13	6°12	24°40	15°18	29°20	10° 6	11°48	12°42	6°D41	6°58	4°D 8	4°36	9°20	25° 6	M10
T 11	19 50 50	26°56'34	21°44	26°46	16°32	29°57	10°18	11°52	12°44	6°41	7° 0	4° 8	4°33	9°27	25° 3	T 11
W12	19 54 46	27°53'56	6°16	28°52	17°46	0°35	10°31	11°55	12°45	6°41	7° 1	4° 8	4°30	9°34	24°59	W12
T 13	19 58 43	28°51'18	20°24	0°15	18°59	1°12	10°44	11°59	12°47	6°41	7° 3	4° 9	4°27	9°40	24°56	T 13
F 14	20 2 40	29°48'41	4° 5	3° 0	20°13	1°49	10°57	12° 2	12°48	6°41	7° 5	4° 9	4°24	9°47	24°53	F 14
S 15	20 6 36	0°46'04	17°21	5° 3	21°27	2°26	11°10	12° 6	12°50	6°42	7° 7	4°10	4°21	9°54	24°49	S 15
S 16	20 10 33	1°43'29	0°12	7° 4	22°41	3° 2	11°23	12° 9	12°52	6°42	7° 8	4°R10	4°17	10° 0	24°46	S 16
M17	20 14 29	2°40'54	12°44	9° 4	23°54	3°39	11°36	12°12	12°54	6°42	7°10	4°10	4°14	10° 7	24°42	M17
T 18	20 18 26	3°38'19	24°58	11° 2	25° 8	4°15	11°50	12°15	12°56	6°42	7°12	4°10	4°11	10°14	24°39	T 18
W19	20 22 22	4°35'46	7° 1	12°59	26°22	4°51	12° 3	12°18	12°57	6°42	7°14	4°D10	4° 8	10°20	24°36	W19
T 20	20 26 19	5°33'13	18°55	14°55	27°36	5°27	12°16	12°21	12°59	6°43	7°16	4°10	4° 5	10°27	24°32	T 20
F 21	20 30 15	6°30'41	0°34	16°49	28°50	6° 2	12°29	12°24	13° 1	6°43	7°18	4°10	4° 2	10°34	24°29	F 21
S 22	20 34 12	7°28'10	12°33	18°41	0° 4	6°37	12°42	12°27	13° 3	6°44	7°19	4°10	3°58	10°40	24°26	S 22
S 23	20 38 9	8°25'40	24°23	20°32	1°18	7°13	12°55	12°29	13° 5	6°44	7°21	4°10	3°55	10°47	24°22	S 23
M24	20 42 5	9°23'11	6°18	22°21	2°32	7°47	13° 8	12°32	13° 8	6°44	7°23	4°R10	3°52	10°54	24°19	M24
T 25	20 46 2	10°20'43	18°19	24° 9	3°46	8°22	13°21	12°34	13°10	6°45	7°25	4°10	3°49	11° 0	24°16	T 25
W26	20 49 58	11°18'16	0°29	25°55	5° 0	8°56	13°34	12°37	13°12	6°45	7°27	4°10	3°46	11° 7	24°12	W26
T 27	20 53 55	12°15'50	12°48	27°40	6°14	9°30	13°47	12°39	13°14	6°46	7°29	4° 9	3°42	11°14	24° 9	T 27
F 28	20 57 51	13°13'26	25°20	29°23	7°28	10° 4	14° 1	12°41	13°16	6°46	7°31	4° 8	3°39	11°20	24° 6	F 28
S 29	21 1 48	14°11'04	8°15	1°10	8°42	10°38	14°14	12°43	13°19	6°47	7°33	4° 7	3°36	11°27	24° 3	S 29
S 30	21 5 44	15° 8'42	21° 7	2°45	9°56	11°11	14°27	12°45	13°21	6°48	7°35	4° 5	3°33	11°34	24° 0	S 30
M31	21 9 41	16° 6'23	4°25	4°10	11°10	11°44	14°40	12°47	13°24	6°L48	7°37	4° 5	3°30	11°30	23°57	M31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	22n22	3n15	4n17	23n46	0n23	23n32	0n 6	7n 4	2s16	18n56	0n41	13n 1	2s19	4s22	0n38	12s 3
S 2	22 15	8 54	4 52	23 50	0 34	23 32	0 8	7 18	2 16	18 53	0 41	13 3	2 19	4 23	0 38	12 3
M 3	22 7	14 20	5 12	23 52	0 44	23 31	0 10	7 32	2 16	18 50	0 41	13 4	2 19	4 23	0 38	12 3
T 4	21 59	19 14	5 16	23 51	0 53	23 29	0 13	7 46	2 16	18 46	0 41	13 5	2 20	4 24	0 38	12 3
W 5	21 50	23 14	5 1	23 47	1 2	23 27	0 15	8 0	2 17	18 43	0 41	13 6	2 20	4 24	0 38	12 3
T 6	21 41	25 53	4 27	23 41	1 10	23 24	0 18	8 14	2 17	18 39	0 41	13 7	2 20	4 25	0 38	12 3
F 7	21 31	26 49	3 35	23 31	1 17	23 20	0 20	8 28	2 17	18 36	0 41	13 8	2 20	4 25	0 38	12 3
S 8	21 22	25 47	2 27	23 19	1 23	23 16	0 22	8 41	2 17	18 33	0 41	13 9	2 20	4 26	0 38	12 3
S 9	21 11	22 52	1 8	23 5	1 29	23 10	0 25	8 55	2 17	18 29	0 41	13 10	2 21	4 27	0 38	12 3
M10	21 1	18 22	0s15	22 48	1 34	23 5	0 27	9 8	2 17	18 26	0 41	13 11	2 21	4 27	0 38	12 4
T 11	20 50	12 47	1 36	22 28	1 38	22 58	0 29	9 21	2 17	18 22	0 41	13 12	2 21	4 28	0 38	12 4
W12	20 39	6 37	2 49	22 6	1 41	22 51	0 32	9 34	2 17	18 19	0 41	13 13	2 21	4 28	0 38	12 4
T 13	20 27	0 18	3 50	21 42	1 44	22 43	0 34	9 47	2 17	18 15	0 41	13 14	2 21	4 29	0 38	12 4
F 14	20 15	5s50	4 35	21 15	1 46	22 35	0 36	10 0	2 17	18 12	0 41	13 15	2 22	4 30	0 38	12 4
S 15	20 3	11 30	5 4	20 47	1 47	22 25	0 38	10 13	2 17	18 8	0 42	13 16	2 22	4 31	0 37	12 4
S 16	19 50	16 31	5 17	20 17	1 47	22 15	0 40	10 25	2 17	18 5	0 42	13 16	2 22	4 31	0 37	12 4
M17	19 37	20 41	5 14	19 46	1 47	22 5	0 42	10 37	2 17	18 1	0 42	13 17	2 22	4 32	0 37	12 4
T 18	19 24	23 52	4 57	19 12	1 46	21 54	0 44	10 50	2 17	17 58	0 42	13 18	2 23	4 33	0 37	12 4
W19	19 10	25 56	4 27	18 38	1 44	21 42	0 46	11 2	2 17	17 54	0 42	13 19	2 23	4 34	0 37	12 5
T 20	18 56	26 48	3 46	18 2	1 42	21 30	0 48	11 14	2 16	17 50	0 42	13 19	2 23	4 34	0 37	12 5
F 21	18 42	26 26	2 55	17 26	1 40	21 16	0 50	11 26	2 16	17 47	0 42	13 20	2 23	4 35	0 37	12 5
S 22	18 27	24 52	1 57	16 48	1 37	21 3	0 52	11 37	2 16	17 43	0 42	13 20	2 23	4 36	0 37	12 5
S 23	18 13	22 11	0 54	16 10	1 33	20 48	0 54	11 49	2 16	17 39	0 42	13 21	2 24	4 37	0 37	12 5
M24	17 57	18 34	0n12	15 30	1 29	20 34	0 56	12 0	2 16	17 36	0 42	13 22	2 24	4 38	0 37	12 5
T 25	17 42	14 9	1 18	14 50	1 24	20 18	0 58	12 12	2 16	17 32	0 42	13 22	2 24	4 39	0 37	12 6
W26	17 26	9 8	2 21	14 10	1 20	20 2	0 59	12 23	2 15	17 28	0 42	13 23	2 24	4 39	0 37	12 6
T 27	17 10	3 43	3 18	13 29	1 14	19 45	1 1	12 34	2 15	17 25	0 42	13 23	2 25	4 40	0 37	12 6
F 28	16 54	1n55	4 7	12 47	1 9	19 28	1 3	12 45	2 15	17 21	0 42	13 23	2 25	4 41	0 37	12 6
S 29	16 37	7 35	4 45	12 6	1 3	19 10	1 4	12 56	2 15	17 17	0 42	13 24	2 25	4 42	0 37	12 7
S 30	16 20	13 1	5 9	11 24	0 56	18 52	1 6	13 6	2 14	17 13	0 43	13 24	2 25	4 43	0 37	12 7
M31	16n 3	17n59	5n17	10n42	0n50	18n33	1n 7	13n17	2s14	17n10	0n43	13n25	2s25	4s44	0n37	12s 7

Julian Day Number = 2257791.5, Delta T = 05m53s

Ecliptic obliquity = 23°30'35, Nutation = 0°00'14, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°20'20, Lahiri = 16°27'20 Julian Calendar 1 July 1469 == Greg. Calendar 10 July 1469



## ASTRODIENST EPHEMERIS for the year 1469

geocentric

AUGUST 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	21 13 38	17°13'05"	18°02'21"	6°12'24"	12°12'24"	12°18'17"	14°02'53"	12°18'49"	13°02'26"	6°14'49"	7°13'39"	4°02'44"	3°02'27"	11°13'47"	23°02'54"	T 1
W 2	21 17 34	18°01'49"	18°11'58"	7°03'38"	13°03'39"	12°15'50"	15°06'06"	12°02'50"	13°02'29"	6°06'50"	7°04'41"	4°04'48"	3°03'23"	11°05'53"	23°03'51"	W 2
T 3	21 21 31	18°05'59"	16°03'13"	9°12'45"	14°05'53"	13°02'22"	15°05'19"	12°02'52"	13°03'31"	6°05'51"	7°04'43"	4°04'06"	3°03'20"	12°02'00"	23°04'48"	T 3
F 4	21 25 27	19°05'57"	10°03'44"	10°04'45"	16°07'17"	13°05'54"	15°03'32"	12°05'53"	13°03'34"	6°05'51"	7°04'45"	4°04'07"	3°03'17"	12°02'07"	23°04'55"	F 4
S 5	21 29 24	20°05'55"	15°02'29"	12°02'17"	17°02'21"	14°02'26"	15°04'46"	12°05'54"	13°03'36"	6°05'52"	7°04'47"	4°04'08"	3°03'14"	12°02'13"	23°04'42"	S 5
S 6	21 33 20	21°05'53"	0°02'21"	13°04'47"	18°03'36"	14°05'57"	15°05'59"	12°05'56"	13°03'39"	6°05'53"	7°04'49"	4°04'08"	3°03'11"	12°02'20"	23°03'39"	S 6
M 7	21 37 17	22°05'50"	15°03'13"	15°03'16"	19°05'50"	15°05'28"	16°06'12"	12°05'57"	13°04'42"	6°05'54"	7°05'51"	4°04'08"	3°03'07"	12°02'27"	23°03'36"	M 7
T 8	21 41 13	23°04'48"	29°05'58"	16°04'43"	21°04'15"	15°05'58"	16°06'25"	12°05'58"	13°04'44"	6°05'55"	7°05'53"	4°04'07"	3°03'04"	12°02'33"	23°03'33"	T 8
W 9	21 45 10	24°04'46"	14°02'28"	18°09'22"	22°02'19"	16°06'29"	16°06'38"	12°05'59"	13°04'47"	6°05'56"	7°05'56"	4°04'05"	3°03'01"	12°02'40"	23°03'31"	W 9
T 10	21 49 07	25°04'44"	28°03'38"	19°03'33"	23°03'33"	16°06'59"	16°06'51"	12°05'59"	13°05'00"	6°05'57"	7°05'58"	4°04'02"	2°58'58"	12°02'47"	23°03'28"	T 10
F 11	21 53 03	26°04'42"	12°02'23"	20°05'56"	24°04'47"	17°02'28"	17°02'04"	13°05'00"	13°05'53"	6°05'58"	8°05'00"	3°05'59"	2°58'55"	12°02'53"	23°03'25"	F 11
S 12	21 57 00	27°04'40"	25°02'44"	22°02'17"	26°02'02"	17°05'58"	17°05'17"	13°05'01"	13°05'56"	6°05'59"	8°05'02"	3°05'56"	2°58'52"	13°03'00"	23°03'23"	S 12
S 13	22 00 56	28°03'38"	8°02'39"	23°03'37"	27°02'16"	18°02'27"	17°03'30"	13°05'01"	13°05'58"	7°06'00"	8°05'04"	3°05'53"	2°58'48"	13°03'07"	23°03'20"	S 13
M14	22 04 53	29°03'36"	21°03'13"	24°05'55"	28°03'31"	18°05'55"	17°04'43"	13°05'01"	14°06'01"	7°06'01"	8°05'06"	3°05'52"	2°58'45"	13°03'13"	23°03'17"	M14
T 15	22 08 49	0°03'44"	3°02'28"	26°02'11"	29°04'45"	19°02'23"	17°05'56"	13°05'02"	14°06'04"	7°06'02"	8°05'08"	3°05'52"	2°58'42"	13°03'20"	23°03'15"	T 15
W16	22 12 46	1°03'24"	15°02'29"	27°02'25"	0°02'59"	19°05'51"	18°06'09"	13°05'02"	14°06'07"	7°06'03"	8°05'10"	3°05'52"	2°58'39"	13°03'27"	23°03'13"	W16
T 17	22 16 42	2°03'04"	27°02'22"	28°03'38"	2°02'14"	20°02'18"	18°06'22"	13°05'02"	14°06'10"	7°06'04"	8°05'12"	3°05'54"	2°58'36"	13°03'33"	23°03'10"	T 17
F 18	22 20 39	3°02'50"	9°02'31"	29°04'49"	3°02'48"	20°04'45"	18°06'35"	13°05'03"	14°06'13"	7°06'05"	8°05'15"	3°05'56"	2°58'33"	13°03'40"	23°03'08"	F 18
S 19	22 24 36	4°02'57"	21°02'00"	0°02'58"	4°04'43"	21°02'12"	18°06'48"	13°05'03"	14°06'16"	7°06'07"	8°05'17"	3°05'57"	2°58'29"	13°03'47"	23°03'06"	S 19
S 20	22 28 32	5°02'52"	2°02'54"	2°04'00"	5°05'57"	21°03'38"	19°06'00"	13°05'03"	14°06'20"	7°06'08"	8°05'19"	3°05'58"	2°58'26"	13°03'53"	23°03'04"	S 20
M21	22 32 29	6°02'33"	14°05'55"	3°03'09"	7°02'12"	22°02'04"	19°06'13"	13°05'03"	14°06'23"	7°06'09"	8°05'21"	3°05'57"	2°58'23"	14°04'00"	23°03'01"	M21
T 22	22 36 25	7°02'14"	27°02'07"	4°04'11"	8°02'26"	22°02'29"	19°06'26"	13°05'03"	14°06'26"	7°06'11"	8°05'23"	3°05'55"	2°58'20"	14°04'07"	22°02'59"	T 22
W23	22 40 22	8°02'00"	9°02'31"	5°05'11"	9°04'11"	22°02'54"	19°06'39"	12°05'59"	14°06'29"	7°06'12"	8°05'25"	3°05'52"	2°58'17"	14°04'13"	22°02'57"	W23
T 24	22 44 18	9°01'28"	22°02'00"	6°06'08"	10°05'56"	23°02'18"	19°06'52"	12°05'59"	14°06'32"	7°06'13"	8°05'27"	3°05'46"	2°58'13"	14°04'20"	22°02'55"	T 24
F 25	22 48 15	10°01'42"	5°02'00"	7°02'12"	12°02'10"	23°02'42"	20°06'04"	12°05'58"	14°06'36"	7°06'15"	8°05'29"	3°05'40"	2°58'10"	14°04'27"	22°02'53"	F 25
S 26	22 52 11	11°01'50"	18°02'05"	7°05'53"	13°02'25"	24°02'06"	20°06'17"	12°05'57"	14°06'39"	7°06'16"	8°05'32"	3°05'34"	2°58'07"	14°04'33"	22°02'52"	S 26
S 27	22 56 08	12°01'32"	1°02'23"	8°04'42"	14°03'39"	24°02'29"	20°06'30"	12°05'56"	14°06'42"	7°06'18"	8°05'34"	3°05'28"	2°58'04"	14°04'40"	22°02'50"	S 27
M28	23 00 05	13°01'15"	14°03'53"	9°02'26"	15°05'54"	24°02'51"	20°06'42"	12°05'55"	14°06'46"	7°06'19"	8°05'36"	3°05'24"	2°58'02"	14°04'46"	22°02'48"	M28
T 29	23 04 01	14°01'02"	28°03'35"	10°02'07"	17°06'19"	25°02'53"	20°06'55"	12°05'53"	14°06'49"	7°06'21"	8°05'38"	3°05'21"	1°58'58"	14°04'53"	22°02'46"	T 29
W30	23 07 58	15°00'51"	12°02'29"	10°04'44"	18°02'23"	25°03'35"	21°06'07"	12°05'52"	14°06'52"	7°06'22"	8°05'40"	3°05'20"	1°58'54"	15°05'00"	22°02'45"	W30
T 31	23 11 54	16°00'17"	26°02'33"	11°02'17"	19°02'38"	25°03'56"	21°06'20"	12°05'51"	14°06'56"	7°06'24"	8°05'42"	3°05'20"	1°58'51"	15°05'06"	22°02'43"	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	15n46	22n10	5n 7	9n59	0n43	18n14	1n 9	13n27	2s14	17n 6	0n43	13n25	2s26	4s45	0n37	12s 7
W 2	15 28	25 11	4 40	9 17	0 36	17 54	1 10	13 37	2 13	17 2	0 43	13 25	2 26	4 46	0 37	12 8
T 3	15 10	26 41	3 55	8 35	0 28	17 33	1 11	13 47	2 13	16 58	0 43	13 25	2 26	4 47	0 37	12 8
F 4	14 52	26 25	2 54	7 52	0 21	17 12	1 12	13 57	2 13	16 54	0 43	13 26	2 26	4 48	0 37	12 8
S 5	14 34	24 17	1 41	7 10	0 13	16 51	1 14	14 7	2 12	16 51	0 43	13 26	2 27	4 49	0 37	12 9
S 6	14 15	20 29	0 21	6 28	0 5	16 29	1 15	14 16	2 12	16 47	0 43	13 26	2 27	4 50	0 37	12 9
M 7	13 56	15 21	1s 1	5 46	0s 3	16 7	1 16	14 26	2 11	16 43	0 43	13 26	2 27	4 51	0 37	12 9
T 8	13 37	9 22	2 18	5 5	0 12	15 44	1 17	14 35	2 11	16 39	0 43	13 26	2 27	4 52	0 37	12 10
W 9	13 18	2 59	3 25	4 23	0 20	15 21	1 18	14 44	2 10	16 35	0 43	13 26	2 28	4 53	0 37	12 10
T 10	12 59	3s23	4 17	3 43	0 29	14 57	1 19	14 53	2 10	16 31	0 43	13 26	2 28	4 55	0 37	12 10
F 11	12 39	9 24	4 53	3 2	0 37	14 33	1 20	15 2	2 9	16 27	0 44	13 26	2 28	4 56	0 37	12 11
S 12	12 19	14 48	5 11	2 22	0 46	14 8	1 20	15 10	2 9	16 24	0 44	13 26	2 28	4 57	0 37	12 11
S 13	11 59	19 22	5 14	1 42	0 55	13 43	1 21	15 19	2 8	16 20	0 44	13 26	2 29	4 58	0 37	12 12
M14	11 39	22 56	5 0	1 3	1 4	13 18	1 22	15 27	2 8	16 16	0 44	13 26	2 29	4 59	0 37	12 12
T 15	11 18	25 23	4 34	0 24	1 13	12 53	1 22	15 35	2 7	16 12	0 44	13 26	2 29	5 0	0 36	12 12
W16	10 57	26 37	3 56	0s14	1 22	12 27	1 23	15 43	2 6	16 8	0 44	13 25	2 29	5 2	0 36	12 13
T 17	10 37	26 37	3 8	0 51	1 31	12 0	1 23	15 51	2 6	16 4	0 44	13 25	2 29	5 3	0 36	12 13
F 18	10 16	25 23	2 12	1 27	1 40	11 34	1 24	15 59	2 5	16 0	0 44	13 25	2 30	5 4	0 36	12 14
S 19	9 54	23 2	1 11	2 3	1 49	11 7	1 24	16 7	2 4	15 56	0 44	13 25	2 30	5 5	0 36	12 14
S 20	9 33	19 40	0 6	2 38	1 58	10 40	1 24	16 14	2 4	15 52	0 44	13 24	2 30	5 6	0 36	12 15
M21	9 12	15 27	1n 0	3 12	2 7	10 12	1 25	16 22	2 3	15 48	0 44	13 24	2 30	5 8	0 36	12 15
T 22	8 50	10 35	2 3	3 44	2 16	9 44	1 25	16 29	2 2	15 44	0 45	13 24	2 31	5 9	0 36	12 16
W23	8 28	5 13	3 2	4 16	2 24	9 16	1 25	16 36	2 1	15 41	0 45	13 23	2 31	5 10	0 36	12 16
T 24	8 6	0n26	3 53	4 47	2 33	8 48	1 25	16 43	2 0	15 37	0 45	13 23	2 31	5 11	0 36	12 17
F 25	7 44	6 10	4 33	5 16	2 41	8 19	1 25	16 49	2 0	15 33	0 45	13 22	2 31	5 13	0 36	12 17
S 26	7 22	11 43	4 59	5 44	2 49	7 50	1 25	16 56	1 59	15 29	0 45	13 22	2 32	5 14	0 36	12 18
S 27	7 0	16 50	5 10	6 10	2 57	7 21	1 24	17 3	1 58	15 25	0 45	13 21	2 32	5 15	0 36	12 18
M28	6 37	21 11	5 4	6 35	3 5	6 52	1 24	17 9	1 57	15 21	0 45	13 21	2 32	5 17	0 36	12 19
T 29	6 15	24 28	4 41	6 58	3 12	6 23	1 24	17 15	1 56	15 17	0 45	13 20	2 32	5 18	0 36	12 19
W30	5 52	26 20	4 1	7 19	3 19	5 53	1 23	17 21	1 55	15 13	0 45	13 20	2 32	5 19	0 36	12 20
T 31	5n29	26n34	3n 6	7s38	3s26	5n23	1n23	17n27	1s54	15n 9	0n46	13n19	2s33	5s21	0n36	12s20

Julian Day Number = 2257822.5, Delta T = 05m53s

Ecliptic obliquity = 23°30'35", Nutation = 0°00'15", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°20'24", Lahiri = 16°27'25" Julian Calendar 1 Aug. 1469 == Greg. Calendar 10 Aug. 1469



# ASTRODIENST EPHEMERIS for the year 1469

## geocentric

OCTOBER 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	1 14 7	16♂38'47	19♂46	28♂52	28♂17	1°R13	27♂20	11°R19	16♂49	8♂22	9♂44	1°R11	0♂13	18♂33	22♂31	S 1
M 2	1 18 4	17°38'25	3♂49	29°36	29°32	1♂10	27°30	11♂14	16°53	8°24	9°46	1♂8	0°10	18°39	22°31	M 2
T 3	1 22 0	18°38'06	17°47	0♂28	0♂47	1°7	27°41	11°10	16°57	8°26	9°48	1°1	0°6	18°46	22°32	T 3
W 4	1 25 57	19°37'48	1♂38	1°27	2°2	1°3	27°51	11°6	17°0	8°28	9°49	0°52	0°3	18°52	22°33	W 4
T 5	1 29 54	20°37'33	15°17	2°33	3°17	0°57	28°1	11°1	17°4	8°30	9°51	0°41	0°0	18°59	22°34	T 5
F 6	1 33 50	21°37'20	28°41	3°44	4°32	0°51	28°11	10°57	17°8	8°32	9°53	0°28	29♂57	19°6	22°35	F 6
S 7	1 37 47	22°37'09	11♂49	5°0	5°47	0°44	28°21	10°52	17°12	8°35	9°54	0°15	29°54	19°12	22°36	S 7
S 8	1 41 43	23°37'00	24°37	6°21	7°2	0°36	28°31	10°48	17°15	8°37	9°56	0°3	29°50	19°19	22°37	S 8
M 9	1 45 40	24°36'52	7♂8	7°45	8°16	0°27	28°41	10°43	17°19	8°39	9°58	29♂53	29°47	19°26	22°39	M 9
T 10	1 49 36	25°36'47	19°22	9°12	9°31	0°18	28°51	10°39	17°23	8°41	9°59	29°46	29°44	19°32	22°40	T 10
W 11	1 53 33	26°36'43	1♂22	10°41	10°46	0°7	29°0	10°34	17°27	8°43	10°1	29°42	29°41	19°39	22°41	W 11
T 12	1 57 29	27°36'41	13°14	12°13	12°1	29♂56	29°10	10°29	17°30	8°46	10°3	29°40	29°38	19°46	22°43	T 12
F 13	2 1 26	28°36'40	25°2	13°46	13°16	29°43	29°19	10°25	17°34	8°48	10°4	29°39	29°35	19°52	22°44	F 13
S 14	2 5 23	29°36'41	6♂51	15°21	14°31	29°30	29°29	10°20	17°38	8°50	10°6	29°39	29°31	19°59	22°46	S 14
S 15	2 9 19	0♂36'44	18°47	16°57	15°46	29°17	29°38	10°15	17°42	8°52	10°7	29°38	29°28	20°6	22°48	S 15
M 16	2 13 16	1°36'48	0♂56	18°33	17°1	29°2	29°47	10°10	17°45	8°54	10°9	29°36	29°25	20°12	22°49	M 16
T 17	2 17 12	2°36'54	13°23	20°10	18°16	28°47	29°56	10°6	17°49	8°57	10°10	29°31	29°22	20°19	22°51	T 17
W 18	2 21 9	3°37'02	26°9	21°48	19°30	28°31	0♂5	10°1	17°53	8°59	10°12	29°23	29°19	20°26	22°53	W 18
T 19	2 25 5	4°37'11	9°Y19	23°26	20°45	28°14	0°13	9°56	17°56	9°1	10°13	29°13	29°16	20°32	22°55	T 19
F 20	2 29 2	5°37'22	22°52	25°4	22°0	27°56	0°22	9°51	18°0	9°3	10°14	29°1	29°12	20°39	22°57	F 20
S 21	2 32 58	6°37'35	6♂44	26°42	23°15	27°38	0°30	9°46	18°4	9°6	10°16	28°48	29°9	20°45	22°59	S 21
S 22	2 36 55	7°37'49	20°54	28°20	24°30	27°20	0°39	9°41	18°7	9°8	10°17	28°36	29°6	20°52	23°1	S 22
M 23	2 40 52	8°38'06	5♂13	29°58	25°45	27°0	0°47	9°36	18°11	9°10	10°18	28°26	29°3	20°59	23°3	M 23
T 24	2 44 48	9°38'24	19°38	1♂36	27°0	26°41	0°55	9°32	18°14	9°12	10°20	28°19	29°0	21°5	23°6	T 24
W 25	2 48 45	10°38'45	4♂2	3°13	28°15	26°20	1°3	9°27	18°18	9°15	10°21	28°14	28°56	21°12	23°8	W 25
T 26	2 52 41	11°39'07	18°21	4°51	29°29	26°0	1°11	9°22	18°22	9°17	10°22	28°12	28°53	21°19	23°10	T 26
F 27	2 56 38	12°39'31	2♂33	6°28	0♂44	25°39	1°19	9°17	18°25	9°19	10°23	28°D12	28°50	21°25	23°13	F 27
S 28	3 0 34	13°39'57	16°36	8°5	1°59	25°17	1°26	9°12	18°29	9°21	10°25	28°R12	28°47	21°32	23°15	S 28
S 29	3 4 31	14°40'26	0♂29	9°42	3°14	24°55	1°34	9°7	18°32	9°24	10°26	28°11	28°44	21°39	23°18	S 29
M 30	3 8 27	15°40'55	1♂14	11°18	4°29	24°33	1°41	9°2	18°36	9°26	10°27	28°8	28°41	21°45	23°21	M 30
T 31	3 12 24	16♂41'27	27♂49	12♂55	5♂44	24♂11	1♂48	8♂58	18♂39	9♂28	10♂28	28♂3	28♂37	21♂52	23♂23	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	6s34	13n24	1s37	1n48	1n29	10s16	0n41	19n25	1s4	13n13	0n50	12n46	2s38	6s5	0n36	12s40
M 2	6 57	7 36	2 44	1 39	1 38	10 44	0 39	19 27	1 2	13 10	0 50	12 45	2 38	6 6	0 36	12 41
T 3	7 19	1 28	3 40	1 26	1 46	11 13	0 36	19 29	0 59	13 6	0 50	12 43	2 38	6 8	0 36	12 41
W 4	7 42	4s40	4 23	1 8	1 52	11 41	0 34	19 30	0 57	13 3	0 51	12 42	2 38	6 9	0 36	12 42
T 5	8 5	10 29	4 50	0 46	1 57	12 9	0 32	19 31	0 54	12 59	0 51	12 41	2 38	6 10	0 36	12 43
F 6	8 27	15 43	5 0	0 21	2 1	12 36	0 30	19 33	0 52	12 56	0 51	12 39	2 38	6 12	0 36	12 43
S 7	8 50	20 5	4 54	0s7	2 3	13 3	0 27	19 34	0 49	12 53	0 51	12 38	2 38	6 13	0 36	12 44
S 8	9 12	23 24	4 34	0 37	2 5	13 30	0 25	19 34	0 47	12 50	0 51	12 36	2 38	6 15	0 36	12 45
M 9	9 34	25 31	4 0	1 10	2 5	13 57	0 23	19 35	0 44	12 46	0 52	12 35	2 38	6 16	0 36	12 46
T 10	9 56	26 20	3 16	1 45	2 5	14 23	0 20	19 36	0 41	12 43	0 52	12 33	2 38	6 18	0 36	12 46
W 11	10 18	25 54	2 24	2 21	2 4	14 49	0 18	19 36	0 39	12 40	0 52	12 32	2 38	6 19	0 36	12 47
T 12	10 39	24 16	1 26	2 59	2 2	15 14	0 16	19 36	0 36	12 37	0 52	12 30	2 38	6 21	0 36	12 48
F 13	11 1	21 35	0 25	3 37	1 59	15 40	0 13	19 37	0 33	12 34	0 52	12 29	2 38	6 22	0 36	12 48
S 14	11 22	18 0	0n38	4 17	1 56	16 4	0 11	19 37	0 30	12 31	0 53	12 27	2 38	6 23	0 36	12 49
S 15	11 43	13 40	1 40	4 57	1 52	16 29	0 8	19 36	0 27	12 27	0 53	12 26	2 38	6 25	0 36	12 50
M 16	12 4	8 43	2 38	5 38	1 48	16 52	0 6	19 36	0 25	12 24	0 53	12 24	2 38	6 26	0 36	12 51
T 17	12 25	3 20	3 29	6 19	1 44	17 16	0 3	19 36	0 22	12 22	0 53	12 23	2 38	6 28	0 36	12 51
W 18	12 46	2n19	4 12	7 0	1 39	17 39	0 1	19 35	0 19	12 19	0 53	12 21	2 38	6 29	0 36	12 52
T 19	13 6	8 2	4 43	7 41	1 33	18 1	0s2	19 34	0 16	12 16	0 54	12 20	2 38	6 30	0 36	12 53
F 20	13 26	13 32	4 59	8 22	1 28	18 23	0 4	19 33	0 13	12 13	0 54	12 18	2 38	6 32	0 36	12 53
S 21	13 46	18 29	4 58	9 3	1 22	18 45	0 7	19 32	0 10	12 10	0 54	12 17	2 38	6 33	0 36	12 54
S 22	14 6	22 30	4 38	9 44	1 16	19 6	0 9	19 31	0 6	12 7	0 54	12 15	2 38	6 35	0 36	12 55
M 23	14 25	25 12	4 2	10 24	1 10	19 27	0 12	19 29	0 3	12 5	0 54	12 14	2 38	6 36	0 36	12 56
T 24	14 45	26 15	3 9	11 4	1 4	19 47	0 14	19 28	0 0	12 2	0 55	12 12	2 38	6 37	0 36	12 56
W 25	15 4	25 31	2 4	11 44	0 57	20 6	0 17	19 26	0n3	11 59	0 55	12 11	2 38	6 39	0 36	12 57
T 26	15 22	23 6	0 52	12 23	0 51	20 25	0 20	19 24	0 6	11 57	0 55	12 9	2 38	6 40	0 36	12 58
F 27	15 41	19 17	0s23	13 1	0 44	20 43	0 22	19 22	0 9	11 54	0 55	12 8	2 38	6 41	0 36	12 58
S 28	15 59	14 23	1 36	13 39	0 38	21 1	0 25	19 20	0 12	11 52	0 55	12 6	2 38	6 43	0 36	12 59
S 29	16 17	8 48	2 42	14 16	0 31	21 18	0 27	19 18	0 15	11 49	0 56	12 5	2 38	6 44	0 36	13 0
M 30	16 35	2 52	3 39	14 53	0 24	21 35	0 30	19 16	0 18	11 47	0 56	12 3	2 38	6 45	0 36	13 1
T 31	16s52	3s8	4s22	15s29	0n17	21s51	0s32	19n13	0n21	11n44	0n56	12n2	2s38	6s47	0n36	13s1

Julian Day Number = 2257883.5, Delta T = 05m53s

Ecliptic obliquity = 23°30'35", Nutation = 0°00'14", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 17°20'33", Lahiri = 16°27'33" Julian Calendar 1 Oct. 1469 == Greg. Calendar 10 Oct. 1469

# ASTRODIENST EPHEMERIS for the year 1469

## geocentric

NOVEMBER 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	3 16 21	17 <sup>11</sup> 42'01	11 <sup>11</sup> 14	14 <sup>11</sup> 31	6 <sup>11</sup> 59	23 <sup>11</sup> R49	1 <sup>11</sup> 55	8 <sup>11</sup> R53	18 <sup>11</sup> 42	9 <sup>11</sup> M30	10 <sup>11</sup> 29	27 <sup>11</sup> R54	28 <sup>11</sup> 34	21 <sup>11</sup> 59	23 <sup>11</sup> 26	W 1
T 2	3 20 17	18 <sup>11</sup> 42'36	24 <sup>11</sup> 29	16 <sup>11</sup> 6	8 <sup>11</sup> 13	23 <sup>11</sup> 26	2 <sup>11</sup> 2	8 <sup>11</sup> 48	18 <sup>11</sup> 46	9 <sup>11</sup> 33	10 <sup>11</sup> 30	27 <sup>11</sup> 43	28 <sup>11</sup> 31	22 <sup>11</sup> 5	23 <sup>11</sup> 29	T 2
F 3	3 24 14	19 <sup>11</sup> 43'13	7 <sup>11</sup> M31	17 <sup>11</sup> 42	9 <sup>11</sup> 28	23 <sup>11</sup> 4	2 <sup>11</sup> 9	8 <sup>11</sup> 43	18 <sup>11</sup> 49	9 <sup>11</sup> 35	10 <sup>11</sup> 31	27 <sup>11</sup> 31	28 <sup>11</sup> 28	22 <sup>11</sup> 12	23 <sup>11</sup> 32	F 3
S 4	3 28 10	20 <sup>11</sup> 43'52	20 <sup>11</sup> 19	19 <sup>11</sup> 17	10 <sup>11</sup> 43	22 <sup>11</sup> 41	2 <sup>11</sup> 16	8 <sup>11</sup> 38	18 <sup>11</sup> 53	9 <sup>11</sup> 37	10 <sup>11</sup> 32	27 <sup>11</sup> 18	28 <sup>11</sup> 25	22 <sup>11</sup> 19	23 <sup>11</sup> 35	S 4
S 5	3 32 7	21 <sup>11</sup> 44'32	2 <sup>11</sup> 54	20 <sup>11</sup> 52	11 <sup>11</sup> 58	22 <sup>11</sup> 19	2 <sup>11</sup> 22	8 <sup>11</sup> 34	18 <sup>11</sup> 56	9 <sup>11</sup> 39	10 <sup>11</sup> 33	27 <sup>11</sup> 7	28 <sup>11</sup> 22	22 <sup>11</sup> 25	23 <sup>11</sup> 38	S 5
M 6	3 36 3	22 <sup>11</sup> 45'13	15 <sup>11</sup> 15	22 <sup>11</sup> 27	13 <sup>11</sup> 13	21 <sup>11</sup> 56	2 <sup>11</sup> 28	8 <sup>11</sup> 29	18 <sup>11</sup> 59	9 <sup>11</sup> 42	10 <sup>11</sup> 34	26 <sup>11</sup> 57	28 <sup>11</sup> 18	22 <sup>11</sup> 32	23 <sup>11</sup> 41	M 6
T 7	3 40 0	23 <sup>11</sup> 45'56	27 <sup>11</sup> 23	24 <sup>11</sup> 2	14 <sup>11</sup> 28	21 <sup>11</sup> 34	2 <sup>11</sup> 34	8 <sup>11</sup> 24	19 <sup>11</sup> 3	9 <sup>11</sup> 44	10 <sup>11</sup> 35	26 <sup>11</sup> 50	28 <sup>11</sup> 15	22 <sup>11</sup> 38	23 <sup>11</sup> 44	T 7
W 8	3 43 56	24 <sup>11</sup> 46'40	9 <sup>11</sup> 30	25 <sup>11</sup> 37	15 <sup>11</sup> 42	21 <sup>11</sup> 12	2 <sup>11</sup> 40	8 <sup>11</sup> 20	19 <sup>11</sup> 6	9 <sup>11</sup> 46	10 <sup>11</sup> 36	26 <sup>11</sup> 46	28 <sup>11</sup> 12	22 <sup>11</sup> 45	23 <sup>11</sup> 47	W 8
T 9	3 47 53	25 <sup>11</sup> 47'26	21 <sup>11</sup> 9	27 <sup>11</sup> 11	16 <sup>11</sup> 57	20 <sup>11</sup> 50	2 <sup>11</sup> 46	8 <sup>11</sup> 15	19 <sup>11</sup> 9	9 <sup>11</sup> 48	10 <sup>11</sup> 37	26 <sup>11</sup> 45	28 <sup>11</sup> 9	22 <sup>11</sup> 52	23 <sup>11</sup> 51	T 9
F 10	3 51 50	26 <sup>11</sup> 48'12	2 <sup>11</sup> 56	28 <sup>11</sup> 45	18 <sup>11</sup> 12	20 <sup>11</sup> 29	2 <sup>11</sup> 52	8 <sup>11</sup> 11	19 <sup>11</sup> 12	9 <sup>11</sup> 50	10 <sup>11</sup> 37	26 <sup>11</sup> D45	28 <sup>11</sup> 6	22 <sup>11</sup> 58	23 <sup>11</sup> 54	F 10
S 11	3 55 46	27 <sup>11</sup> 48'59	14 <sup>11</sup> 44	0 <sup>11</sup> 20	19 <sup>11</sup> 27	20 <sup>11</sup> 8	2 <sup>11</sup> 58	8 <sup>11</sup> 6	19 <sup>11</sup> 15	9 <sup>11</sup> 52	10 <sup>11</sup> 38	26 <sup>11</sup> 45	28 <sup>11</sup> 2	23 <sup>11</sup> 5	23 <sup>11</sup> 57	S 11
S 12	3 59 43	28 <sup>11</sup> 49'48	26 <sup>11</sup> 38	1 <sup>11</sup> 54	20 <sup>11</sup> 42	19 <sup>11</sup> 47	3 <sup>11</sup> 3	8 <sup>11</sup> 2	19 <sup>11</sup> 19	9 <sup>11</sup> 55	10 <sup>11</sup> 39	26 <sup>11</sup> R46	27 <sup>11</sup> 59	23 <sup>11</sup> 12	24 <sup>11</sup> 1	S 12
M13	4 3 39	29 <sup>11</sup> 50'37	8 <sup>11</sup> 45	3 <sup>11</sup> 28	21 <sup>11</sup> 56	19 <sup>11</sup> 27	3 <sup>11</sup> 8	7 <sup>11</sup> 58	19 <sup>11</sup> 22	9 <sup>11</sup> 57	10 <sup>11</sup> 40	26 <sup>11</sup> 46	27 <sup>11</sup> 56	23 <sup>11</sup> 18	24 <sup>11</sup> 4	M13
T 14	4 7 36	0 <sup>11</sup> 51'27	21 <sup>11</sup> 10	5 <sup>11</sup> 1	23 <sup>11</sup> 11	19 <sup>11</sup> 7	3 <sup>11</sup> 13	7 <sup>11</sup> 53	19 <sup>11</sup> 25	9 <sup>11</sup> 59	10 <sup>11</sup> 40	26 <sup>11</sup> 43	27 <sup>11</sup> 53	23 <sup>11</sup> 25	24 <sup>11</sup> 8	T 14
W15	4 11 32	1 <sup>11</sup> 52'18	3 <sup>11</sup> Y56	6 <sup>11</sup> 35	24 <sup>11</sup> 26	18 <sup>11</sup> 48	3 <sup>11</sup> 18	7 <sup>11</sup> 49	19 <sup>11</sup> 28	10 <sup>11</sup> 1	10 <sup>11</sup> 41	26 <sup>11</sup> 39	27 <sup>11</sup> 50	23 <sup>11</sup> 32	24 <sup>11</sup> 11	W15
T 16	4 15 29	2 <sup>11</sup> 53'10	17 <sup>11</sup> 9	8 <sup>11</sup> 9	25 <sup>11</sup> 41	18 <sup>11</sup> 29	3 <sup>11</sup> 23	7 <sup>11</sup> 45	19 <sup>11</sup> 31	10 <sup>11</sup> 3	10 <sup>11</sup> 42	26 <sup>11</sup> 32	27 <sup>11</sup> 47	23 <sup>11</sup> 38	24 <sup>11</sup> 15	T 16
F 17	4 19 25	3 <sup>11</sup> 54'03	0 <sup>11</sup> 48	9 <sup>11</sup> 43	26 <sup>11</sup> 55	18 <sup>11</sup> 11	3 <sup>11</sup> 27	7 <sup>11</sup> 41	19 <sup>11</sup> 34	10 <sup>11</sup> 5	10 <sup>11</sup> 42	26 <sup>11</sup> 24	27 <sup>11</sup> 43	23 <sup>11</sup> 45	24 <sup>11</sup> 18	F 17
S 18	4 23 22	4 <sup>11</sup> 54'57	14 <sup>11</sup> 53	11 <sup>11</sup> 17	28 <sup>11</sup> 10	17 <sup>11</sup> 54	3 <sup>11</sup> 32	7 <sup>11</sup> 37	19 <sup>11</sup> 37	10 <sup>11</sup> 7	10 <sup>11</sup> 43	26 <sup>11</sup> 15	27 <sup>11</sup> 40	23 <sup>11</sup> 52	24 <sup>11</sup> 22	S 18
S 19	4 27 19	5 <sup>11</sup> 55'52	29 <sup>11</sup> 20	12 <sup>11</sup> 50	29 <sup>11</sup> 25	17 <sup>11</sup> 37	3 <sup>11</sup> 36	7 <sup>11</sup> 33	19 <sup>11</sup> 40	10 <sup>11</sup> 9	10 <sup>11</sup> 43	26 <sup>11</sup> 7	27 <sup>11</sup> 37	23 <sup>11</sup> 58	24 <sup>11</sup> 26	S 19
M20	4 31 15	6 <sup>11</sup> 56'48	14 <sup>11</sup> 3	14 <sup>11</sup> 24	0 <sup>11</sup> 40	17 <sup>11</sup> 21	3 <sup>11</sup> 40	7 <sup>11</sup> 29	19 <sup>11</sup> 42	10 <sup>11</sup> 12	10 <sup>11</sup> 44	25 <sup>11</sup> 59	27 <sup>11</sup> 34	24 <sup>11</sup> 5	24 <sup>11</sup> 30	M20
T 21	4 35 12	7 <sup>11</sup> 57'45	28 <sup>11</sup> 54	15 <sup>11</sup> 58	1 <sup>11</sup> 54	17 <sup>11</sup> 5	3 <sup>11</sup> 44	7 <sup>11</sup> 25	19 <sup>11</sup> 45	10 <sup>11</sup> 14	10 <sup>11</sup> 44	25 <sup>11</sup> 54	27 <sup>11</sup> 31	24 <sup>11</sup> 12	24 <sup>11</sup> 34	T 21
W22	4 39 8	8 <sup>11</sup> 58'43	13 <sup>11</sup> 44	17 <sup>11</sup> 31	3 <sup>11</sup> 9	16 <sup>11</sup> 51	3 <sup>11</sup> 47	7 <sup>11</sup> 21	19 <sup>11</sup> 48	10 <sup>11</sup> 16	10 <sup>11</sup> 45	25 <sup>11</sup> 52	27 <sup>11</sup> 28	24 <sup>11</sup> 18	24 <sup>11</sup> 37	W22
T 23	4 43 5	9 <sup>11</sup> 59'42	28 <sup>11</sup> 27	19 <sup>11</sup> 5	4 <sup>11</sup> 24	16 <sup>11</sup> 37	3 <sup>11</sup> 51	7 <sup>11</sup> 17	19 <sup>11</sup> 51	10 <sup>11</sup> 18	10 <sup>11</sup> 45	25 <sup>11</sup> D51	27 <sup>11</sup> 24	24 <sup>11</sup> 25	24 <sup>11</sup> 41	T 23
F 24	4 47 1	11 <sup>11</sup> 0'42	12 <sup>11</sup> 57	20 <sup>11</sup> 39	5 <sup>11</sup> 38	16 <sup>11</sup> 24	3 <sup>11</sup> 54	7 <sup>11</sup> 14	19 <sup>11</sup> 54	10 <sup>11</sup> 20	10 <sup>11</sup> 45	25 <sup>11</sup> 52	27 <sup>11</sup> 21	24 <sup>11</sup> 31	24 <sup>11</sup> 45	F 24
S 25	4 50 58	12 <sup>11</sup> 1'43	27 <sup>11</sup> 11	22 <sup>11</sup> 12	6 <sup>11</sup> 53	16 <sup>11</sup> 11	3 <sup>11</sup> 57	7 <sup>11</sup> 10	19 <sup>11</sup> 56	10 <sup>11</sup> 22	10 <sup>11</sup> 46	25 <sup>11</sup> 53	27 <sup>11</sup> 18	24 <sup>11</sup> 38	24 <sup>11</sup> 49	S 25
S 26	4 54 54	13 <sup>11</sup> 2'46	11 <sup>11</sup> 8	23 <sup>11</sup> 46	8 <sup>11</sup> 8	16 <sup>11</sup> 0	4 <sup>11</sup> 0	7 <sup>11</sup> 7	19 <sup>11</sup> 59	10 <sup>11</sup> 24	10 <sup>11</sup> 46	25 <sup>11</sup> R54	27 <sup>11</sup> 15	24 <sup>11</sup> 45	24 <sup>11</sup> 53	S 26
M27	4 58 51	14 <sup>11</sup> 3'49	24 <sup>11</sup> 47	25 <sup>11</sup> 20	9 <sup>11</sup> 22	15 <sup>11</sup> 49	4 <sup>11</sup> 3	7 <sup>11</sup> 3	20 <sup>11</sup> 2	10 <sup>11</sup> 26	10 <sup>11</sup> 46	25 <sup>11</sup> 54	27 <sup>11</sup> 12	24 <sup>11</sup> 51	24 <sup>11</sup> 58	M27
T 28	5 2 48	15 <sup>11</sup> 4'53	8 <sup>11</sup> 10	26 <sup>11</sup> 53	10 <sup>11</sup> 37	15 <sup>11</sup> 39	4 <sup>11</sup> 6	7 <sup>11</sup> 0	20 <sup>11</sup> 4	10 <sup>11</sup> 28	10 <sup>11</sup> 46	25 <sup>11</sup> 51	27 <sup>11</sup> 8	24 <sup>11</sup> 58	25 <sup>11</sup> 2	T 28
W29	5 6 44	16 <sup>11</sup> 5'59	21 <sup>11</sup> 18	28 <sup>11</sup> 27	11 <sup>11</sup> 52	15 <sup>11</sup> 29	4 <sup>11</sup> 8	6 <sup>11</sup> 57	20 <sup>11</sup> 7	10 <sup>11</sup> 29	10 <sup>11</sup> 47	25 <sup>11</sup> 47	27 <sup>11</sup> 5	25 <sup>11</sup> 5	25 <sup>11</sup> 6	W29
T 30	5 10 41	17 <sup>11</sup> 7'05	4 <sup>11</sup> 11	29 <sup>11</sup> 59	13 <sup>11</sup> 6	15 <sup>11</sup> 21	4 <sup>11</sup> 10	6 <sup>11</sup> 54	20 <sup>11</sup> 9	10 <sup>11</sup> 31	10 <sup>11</sup> 47	25 <sup>11</sup> 41	27 <sup>11</sup> 2	25 <sup>11</sup> 11	25 <sup>11</sup> 10	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
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# ASTRODIENST EPHEMERIS for the year 1469

## geocentric

DECEMBER 1469 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	5 14 37	18° 8' 12"	16° 52'	13° 33'	14° 21'	15° 13'	4° 12'	6° 51'	20° 12'	10° 33'	10° 47'	25° R34	26° 59'	25° 18'	25° 14'	F 1
S 2	5 18 34	19° 9' 20"	29° 21'	3° 6'	15° 35'	15° 8'	4° 14'	6° 48'	20° 14'	10° 35'	10° 47'	25° 27'	26° 56'	25° 25'	25° 19'	S 2
S 3	5 22 30	20° 10' 29"	11° 39'	4° 38'	16° 50'	15° 1'	4° 16'	6° 45'	20° 16'	10° 37'	10° 47'	25° 21'	26° 53'	25° 31'	25° 23'	S 3
M 4	5 26 27	21° 11' 38"	23° 47'	6° 10'	18° 4'	14° 55'	4° 17'	6° 42'	20° 19'	10° 39'	10° 47'	25° 15'	26° 49'	25° 38'	25° 27'	M 4
T 5	5 30 24	22° 12' 48"	5° 36'	7° 42'	19° 19'	14° 51'	4° 19'	6° 39'	20° 21'	10° 41'	10° 47'	25° 12'	26° 46'	25° 45'	25° 32'	T 5
W 6	5 34 20	23° 13' 58"	17° 39'	9° 12'	20° 33'	14° 48'	4° 20'	6° 37'	20° 23'	10° 42'	10° 47'	25° 10'	26° 43'	25° 51'	25° 36'	W 6
T 7	5 38 17	24° 15' 08"	29° 26'	10° 42'	21° 48'	14° 45'	4° 21'	6° 34'	20° 25'	10° 44'	10° 47'	25° D10	26° 40'	25° 58'	25° 41'	T 7
F 8	5 42 13	25° 16' 18"	11° 12'	12° 11'	23° 2'	14° 43'	4° 21'	6° 32'	20° 27'	10° 46'	10° 47'	25° 11'	26° 37'	26° 4'	25° 45'	F 8
S 9	5 46 10	26° 17' 29"	23° 0'	13° 39'	24° 17'	14° 42'	4° 22'	6° 30'	20° 29'	10° 48'	10° 47'	25° 12'	26° 34'	26° 11'	25° 50'	S 9
S 10	5 50 6	27° 18' 40"	4° 54'	15° 5'	25° 31'	14° D42	4° 22'	6° 27'	20° 32'	10° 49'	10° 46'	25° 14'	26° 30'	26° 18'	25° 54'	S 10
M 11	5 54 3	28° 19' 50"	16° 59'	16° 29'	26° 46'	14° 43'	4° R22	6° 25'	20° 33'	10° 51'	10° 46'	25° 16'	26° 27'	26° 24'	25° 59'	M 11
T 12	5 57 59	29° 21' 01"	29° 19'	17° 51'	28° 0'	14° 44'	4° 22'	6° 23'	20° 35'	10° 53'	10° 46'	25° R16	26° 24'	26° 31'	26° 3'	T 12
W 13	6 1 56	0° 32' 21"	12° 1'	19° 10'	29° 14'	14° 46'	4° 22'	6° 21'	20° 37'	10° 54'	10° 46'	25° 16'	26° 21'	26° 38'	26° 8'	W 13
T 14	6 5 53	1° 23' 21"	25° 7'	20° 26'	0° 29'	14° 49'	4° 21'	6° 20'	20° 39'	10° 56'	10° 45'	25° 14'	26° 18'	26° 44'	26° 13'	T 14
F 15	6 9 49	2° 24' 32"	8° 40'	21° 39'	1° 43'	14° 53'	4° 21'	6° 18'	20° 41'	10° 57'	10° 45'	25° 11'	26° 14'	26° 51'	26° 17'	F 15
S 16	6 13 46	3° 25' 42"	22° 42'	22° 47'	2° 57'	14° 57'	4° 20'	6° 17'	20° 43'	10° 59'	10° 45'	25° 8'	26° 11'	26° 58'	26° 22'	S 16
S 17	6 17 42	4° 26' 51"	7° 11'	23° 51'	4° 12'	15° 2'	4° 19'	6° 15'	20° 44'	11° 1'	10° 44'	25° 5'	26° 8'	27° 4'	26° 27'	S 17
M 18	6 21 39	5° 28' 01"	22° 0'	24° 49'	5° 26'	15° 8'	4° 17'	6° 14'	20° 46'	11° 2'	10° 44'	25° 3'	26° 5'	27° 11'	26° 32'	M 18
T 19	6 25 35	6° 29' 11"	7° 5'	25° 40'	6° 40'	15° 14'	4° 16'	6° 13'	20° 48'	11° 4'	10° 43'	25° 1'	26° 2'	27° 18'	26° 36'	T 19
W 20	6 29 32	7° 30' 20"	22° 15'	26° 24'	7° 54'	15° 21'	4° 14'	6° 11'	20° 49'	11° 5'	10° 43'	25° D 0	25° 59'	27° 24'	26° 41'	W 20
T 21	6 33 28	8° 31' 30"	7° 12'	27° 0'	9° 8'	15° 29'	4° 12'	6° 10'	20° 51'	11° 6'	10° 42'	25° 0'	25° 55'	27° 31'	26° 46'	T 21
F 22	6 37 25	9° 32' 39"	22° 15'	27° 26'	10° 22'	15° 38'	4° 10'	6° 10'	20° 52'	11° 8'	10° 42'	25° 1'	25° 52'	27° 38'	26° 51'	F 22
S 23	6 41 22	10° 33' 49"	6° 49'	27° 42'	11° 36'	15° 47'	4° 8'	6° 9'	20° 53'	11° 9'	10° 41'	25° 3'	25° 49'	27° 44'	26° 56'	S 23
S 24	6 45 18	11° 34' 58"	21° 1'	27° R48	12° 50'	15° 57'	4° 6'	6° 8'	20° 55'	11° 10'	10° 41'	25° 4'	25° 46'	27° 51'	27° 1'	S 24
M 25	6 49 15	12° 36' 07"	4° 48'	27° 42'	14° 4'	16° 7'	4° 3'	6° 8'	20° 56'	11° 12'	10° 40'	25° 4'	25° 43'	27° 57'	27° 5'	M 25
T 26	6 53 11	13° 37' 16"	18° 12'	27° 25'	15° 18'	16° 18'	4° 0'	6° 7'	20° 57'	11° 13'	10° 39'	25° R 4	25° 40'	28° 4'	27° 10'	T 26
W 27	6 57 8	14° 38' 26"	1° 14'	26° 55'	16° 32'	16° 29'	3° 58'	6° 7'	20° 58'	11° 14'	10° 39'	25° 4'	25° 36'	28° 11'	27° 15'	W 27
T 28	7 1 4	15° 39' 35"	13° 57'	26° 15'	17° 46'	16° 41'	3° 54'	6° 7'	20° 59'	11° 16'	10° 38'	25° 3'	25° 33'	28° 17'	27° 20'	T 28
F 29	7 5 1	16° 40' 44"	26° 24'	25° 23'	19° 0'	16° 54'	3° 51'	6° D 6	21° 0'	11° 17'	10° 37'	25° 2'	25° 30'	28° 24'	27° 25'	F 29
S 30	7 8 57	17° 41' 52"	8° 38'	24° 23'	20° 13'	17° 7'	3° 48'	6° 6'	21° 1'	11° 18'	10° 36'	25° 1'	25° 27'	28° 31'	27° 30'	S 30
S 31	7 12 54	18° 43' 01"	20° 42'	23° 14'	21° 27'	17° 21'	3° 44'	6° 7'	21° 2'	11° 19'	10° 36'	25° 0'	25° 24'	28° 37'	27° 35'	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	22s59	21s32	4s49	25s43	2s13	24s18	1s34	17n59	1n36	10n59	1n 4	11n26	2s32	7s21	0n36	13s21	1n46	20n49	14n24	21s 5	20s49	21s17	14s42	6n34			
S 2	23 4	24 16	4 18	25 42	2 14	24 11	1 36	17 58	1 38	10 59	1 4	11 26	2 32	7 22	0 36	13 22	1 46	20 49	14 25	21 7	20 50	21 15	14 41	6 33			
S 3	23 9	25 48	3 35	25 40	2 14	24 3	1 37	17 58	1 39	10 59	1 5	11 25	2 32	7 23	0 36	13 22	1 46	20 49	14 25	21 8	20 51	21 13	14 41	6 33			
M 4	23 13	26 5	2 43	25 36	2 14	23 54	1 38	17 57	1 40	10 58	1 5	11 24	2 32	7 24	0 36	13 23	1 46	20 50	14 26	21 9	20 51	21 11	14 40	6 33			
T 5	23 17	25 7	1 44	25 30	2 13	23 45	1 39	17 57	1 42	10 58	1 5	11 24	2 31	7 25	0 36	13 23	1 46	20 50	14 26	21 10	20 52	21 9	14 40	6 32			
W 6	23 20	23 1	0 41	25 23	2 12	23 35	1 40	17 58	1 43	10 58	1 5	11 23	2 31	7 26	0 36	13 24	1 46	20 51	14 27	21 10	20 52	21 7	14 39	6 32			
T 7	23 23	19 57	0n23	25 14	2 10	23 24	1 41	17 58	1 44	10 58	1 6	11 22	2 31	7 26	0 36	13 24	1 46	20 51	14 27	21 10	20 53	21 5	14 39	6 32			
F 8	23 25	16 4	1 27	25 3	2 7	23 12	1 42	17 58	1 45	10 58	1 6	11 22	2 31	7 27	0 36	13 25	1 46	20 52	14 28	21 10	20 54	21 3	14 38	6 32			
S 9	23 27	11 34	2 27	24 52	2 4	23 0	1 42	17 59	1 46	10 58	1 6	11 21	2 30	7 28	0 36	13 25	1 47	20 52	14 28	21 9	20 54	21 0	14 38	6 32			
S 10	23 29	6 37	3 21	24 38	2 0	22 47	1 43	18 0	1 47	10 58	1 7	11 21	2 30	7 29	0 36	13 26	1 47	20 53	14 29	21 9	20 55	20 58	14 37	6 31			
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T 12	23 30	4n 4	4 44	24 7	1 49	22 19	1 44	18 3	1 49	10 59	1 7	11 20	2 30	7 30	0 37	13 27	1 47	20 54	14 30	21 9	20 56	20 54	14 36	6 31			
W13	23 31	9 28	5 7	23 50	1 43	22 5	1 45	18 4	1 50	10 59	1 7	11 20	2 29	7 31	0 37	13 27	1 47	20 54	14 30	21 9	20 57	20 52	14 35	6 31			
T 14	23 30	14 38	5 15	23 31	1 35	21 49	1 45	18 6	1 51	10 59	1 8	11 19	2 29	7 31	0 37	13 28	1 47	20 55	14 31	21 9	20 57	20 50	14 34	6 30			
F 15	23 29	19 16	5 7	23 11	1 27	21 33	1 45	18 8	1 52	11 0	1 8	11 19	2 29	7 32	0 37	13 28	1 47	20 56	14 31	21 10	20 58	20 48	14 34	6 30			
S 16	23 28	23 0	4 40	22 51	1 17	21 16	1 46	18 10	1 53	11 1	1 8	11 19	2 28	7 33	0 37	13 28	1 47	20 56	14 32	21 10	20 58	20 46	14 33	6 30			
S 17	23 26	25 25	3 55	22 30	1 7	20 59	1 46	18 12	1 53	11 1	1 8	11 19	2 28	7 33	0 37	13 29	1 47	20 57	14 32	21 11	20 59	20 43	14 32	6 30			
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T 19	23 21	24 57	1 38	21 46	0 43	20 22	1 46	18 17	1 55	11 3	1 9	11 18	2 28	7 34	0 37	13 30	1 47	20 58	14 33	21 11	21 0	20 39	14 31	6 30			
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T 21	23 14	17 23	1s 8	21 3	0 14	19 43	1 46	18 22	1 56	11 4	1 10	11 18	2 27	7 36	0 37	13 30	1 47	20 59	14 34	21 12	21 1	20 35	14 30	6 29			
F 22	23 10	11 51	2 25	20 42	0n 2	19 23	1 46	18 25	1 56	11 5	1 10	11 18	2 27	7 36	0 37	13 31	1 47	21 0	14 34	21 11	21 2	20 33	14 29	6 29			
S 23	23 5	5 45	3 32	20 22	0 19	19 2	1 45	18 28	1 57	11 7	1 10	11 18	2 26	7 37	0 37	13 31	1 47	21 1	14 35	21 11	21 3	20 30	14 28	6 29			
S 24	23 0	0s28	4 23	20 4	0 37	18 41	1 45	18 32	1 57	11 8	1 10	11 18	2 26	7 37	0 37	13 32	1 47	21 1	14 35	21 11	21 3	20 28	14 27	6 29			
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T 26	22 49	12 0	5 15	19 32	1 14	17 57	1 44	18 39	1 58	11 10	1 11	11 19	2 26	7 38	0 37	13 32	1 47	21 3	14 36	21 11	21 4	20 24	14 26	6 29			
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T 28	22 35	20 50	5 0	19 8	1 52	17 11	1 42	18 46	1 59	11 13	1 11	11 19	2 25	7 39	0 37	13 33	1 47	21 4	14 37	21 11	21 6	20 19	14 24	6 28			
F 29	22 28	23 48	4 31	18 59	2 10	16 47	1 42	18 50	1 59	11 14	1 12	11 19	2 25	7 39	0 37	13 33	1 47	21 5	14 38	21 11	21 6	20 17	14 23	6 28			
S 30	22 20	25 36	3 50	18 53	2 27	16 23	1 41	18 54	2 0	11 16	1 12	11 20	2 24	7 39	0 37	13 34	1 48	21 5	14 38	21 11	21 7	20 15	14 22	6 28			
S 31	22s12	26s10	2s59	18s49	2n43	15s58	1s40	18n59	2n 0	11n17	1n12	11n20	2s24	7s40	0n37	13s34	1n48	21n 6	14n39	21s12	21s 7	20s13	14s21	6n28			