



# Astrodienst Ephemeris Tables for the year 2104

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 2104  
geocentric

JANUARY 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 39 9	9♂37°13	14♂54	18♂43	7♂15	6°R 6	2♂25	8♂50	3°R54	26°R 6	6°R18	3°R57	3♂38	24♂55	13♂3 3	T 1
W 2	6 43 6	10°38'23	29°15	20° 0	8°29	5♂49	2°38	8°56	3♂53	26°R 6	6♂17	3♂57	3°35	25° 2	13° 9	W 2
T 3	6 47 2	11°39'33	13♂37	21°19	9°43	5°31	2°52	9° 2	3°53	26° 6	6°17	3°56	3°31	25° 9	13°15	T 3
F 4	6 50 59	12°40'43	27°56	22°39	10°57	5°12	3° 6	9° 9	3°52	26° 6	6°17	3°55	3°28	25°15	13°21	F 4
S 5	6 54 55	13°41'52	12♂9	24° 1	12°11	4°53	3°19	9°15	3°52	26° 5	6°16	3°D55	3°25	25°22	13°27	S 5
S 6	6 58 52	14°43'02	26°14	25°23	13°26	4°33	3°33	9°21	3°51	26° 5	6°16	3°55	3°22	25°29	13°34	S 6
M 7	7 2 48	15°44'11	10♂8	26°47	14°40	4°13	3°47	9°28	3°51	26° 5	6°16	3°56	3°19	25°36	13°40	M 7
T 8	7 6 45	16°45'19	23°52	28°11	15°54	3°52	4° 1	9°34	3°51	26° 4	6°15	3°57	3°16	25°42	13°46	T 8
W 9	7 10 41	17°46'28	7♂24	29°36	17° 8	3°30	4°15	9°40	3°50	26° 4	6°15	3°58	3°12	25°49	13°52	W 9
T 10	7 14 38	18°47'36	20°44	1♂2	18°23	3° 8	4°29	9°46	3°50	26° 4	6°15	3°59	3° 9	25°56	13°58	T 10
F 11	7 18 35	19°48'44	3♂51	2°29	19°37	2°46	4°43	9°52	3°50	26° 3	6°14	3°R59	3° 6	26° 2	14° 4	F 11
S 12	7 22 31	20°49'51	16°45	3°56	20°51	2°23	4°57	9°58	3°50	26° 3	6°14	3°59	3° 3	26° 9	14°10	S 12
S 13	7 26 28	21°50'59	29°27	5°24	22° 6	2° 0	5°11	10° 4	3°D50	26° 2	6°14	3°58	3° 0	26°16	14°16	S 13
M14	7 30 24	22°52'06	11♂55	6°52	23°20	1°37	5°25	10°10	3°50	26° 2	6°14	3°55	2°56	26°23	14°22	M14
T 15	7 34 21	23°53'12	24°12	8°21	24°34	1°14	5°39	10°16	3°50	26° 1	6°14	3°52	2°53	26°29	14°28	T 15
W16	7 38 17	24°54'19	6♂18	9°51	25°49	0°50	5°53	10°21	3°50	26° 1	6°14	3°48	2°50	26°36	14°34	W16
T 17	7 42 14	25°55'25	18°16	11°21	27° 3	0°26	6° 7	10°27	3°51	26° 0	6°14	3°45	2°47	26°43	14°40	T 17
F 18	7 46 10	26°56'31	0♂10	12°52	28°18	0° 2	6°21	10°33	3°51	25°59	6°14	3°42	2°44	26°49	14°45	F 18
S 19	7 50 7	27°57'37	12° 1	14°23	29°32	29♂38	6°35	10°38	3°51	25°59	6°13	3°40	2°41	26°56	14°51	S 19
S 20	7 54 4	28°58'43	23°56	15°55	0♂46	29°14	6°49	10°44	3°52	25°58	6°13	3°D38	2°37	27° 3	14°57	S 20
M21	7 58 0	29°59'48	5♂59	17°27	2° 1	28°50	7° 3	10°49	3°52	25°57	6°D13	3°38	2°34	27°10	15° 3	M21
T 22	8 1 57	1♂05'3	18°14	19° 0	3°15	28°26	7°17	10°55	3°52	25°56	6°13	3°39	2°31	27°16	15° 9	T 22
W23	8 5 53	2° 1'58	0♂46	20°34	4°30	28° 2	7°32	11° 0	3°53	25°56	6°14	3°41	2°28	27°23	15°15	W23
T 24	8 9 50	3° 3'03	13°40	22° 8	5°45	27°39	7°46	11° 5	3°54	25°55	6°14	3°43	2°25	27°30	15°21	T 24
F 25	8 13 46	4° 4'07	26°58	23°43	6°59	27°15	8° 0	11°11	3°54	25°54	6°14	3°R44	2°22	27°37	15°27	F 25
S 26	8 17 43	5° 5'11	10♂41	25°18	8°14	26°52	8°14	11°16	3°55	25°53	6°14	3°44	2°18	27°43	15°32	S 26
S 27	8 21 39	6° 6'14	24°49	26°54	9°28	26°29	8°28	11°21	3°56	25°52	6°14	3°42	2°15	27°50	15°38	S 27
M28	8 25 36	7° 7'16	9♂18	28°30	10°43	26° 7	8°43	11°26	3°56	25°51	6°14	3°39	2°12	27°57	15°44	M28
T 29	8 29 33	8° 8'17	24° 2	0♂7	11°57	25°45	8°57	11°31	3°57	25°50	6°14	3°34	2° 9	28° 3	15°50	T 29
W30	8 33 29	9° 9'17	8♂53	1°45	13°12	25°23	9°11	11°36	3°58	25°49	6°14	3°29	2° 6	28°10	15°55	W30
T 31	8 37 26	10♂10'17	23♂43	3♂23	14♂27	25♂2	9♂25	11♂41	3♂59	25♂48	6♂15	3♂23	2♂2	28♂17	16♂1	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	decl lat
T 1	23s 5	13s 2	3n28	21s44	1n14	19s58	1n34	22n27	3n51	20s 4	0s28	20s 4	1n43	12n21	0s29	2n38
W 2	23 0	7 39	4 21	21 58	1 5	20 12	1 31	22 34	3 53	20 1	0 28	20 5	1 43	12 21	0 29	2 38
T 3	22 55	1 52	4 57	22 12	0 57	20 25	1 29	22 41	3 55	19 58	0 28	20 6	1 43	12 21	0 29	2 38
F 4	22 49	4n 0	5 15	22 25	0 48	20 38	1 27	22 47	3 57	19 55	0 28	20 6	1 43	12 21	0 29	2 38
S 5	22 43	9 37	5 13	22 37	0 40	20 50	1 25	22 54	3 59	19 52	0 28	20 7	1 43	12 21	0 29	2 38
S 6	22 37	14 40	4 53	22 49	0 32	21 2	1 23	23 1	4 2	19 49	0 28	20 8	1 43	12 20	0 29	2 38
M 7	22 30	18 54	4 16	22 59	0 24	21 13	1 20	23 8	4 4	19 45	0 29	20 9	1 43	12 20	0 29	2 38
T 8	22 23	22 1	3 24	23 9	0 16	21 23	1 18	23 15	4 5	19 42	0 29	20 10	1 43	12 20	0 29	2 38
W 9	22 15	23 52	2 22	23 17	0 8	21 33	1 15	23 22	4 7	19 39	0 29	20 11	1 43	12 20	0 29	2 39
T 10	22 7	24 19	1 13	23 25	0 0	21 42	1 13	23 29	4 9	19 36	0 29	20 12	1 44	12 20	0 29	2 39
F 11	21 58	23 23	0 1	23 31	0s 7	21 51	1 11	23 36	4 11	19 32	0 29	20 13	1 44	12 20	0 29	2 39
S 12	21 49	21 13	1s10	23 37	0 15	21 59	1 8	23 42	4 12	19 29	0 29	20 13	1 44	12 20	0 29	2 39
S 13	21 39	18 2	2 16	23 41	0 22	22 6	1 5	23 49	4 14	19 26	0 29	20 14	1 44	12 20	0 29	2 40
M14	21 29	14 6	3 14	23 44	0 29	22 13	1 3	23 56	4 15	19 23	0 29	20 15	1 44	12 20	0 29	2 40
T 15	21 19	9 38	4 2	23 45	0 36	22 19	1 0	24 2	4 16	19 19	0 29	20 16	1 44	12 20	0 29	2 40
W16	21 8	4 52	4 39	23 46	0 42	22 24	0 58	24 9	4 17	19 16	0 29	20 16	1 44	12 20	0 29	2 40
T 17	20 57	0s 1	5 3	23 45	0 49	22 29	0 55	24 15	4 18	19 12	0 29	20 17	1 44	12 21	0 29	2 41
F 18	20 45	4 51	5 14	23 43	0 55	22 33	0 52	24 21	4 19	19 9	0 29	20 18	1 44	12 21	0 29	2 41
S 19	20 33	9 31	5 11	23 40	1 1	22 36	0 50	24 27	4 20	19 5	0 29	20 19	1 44	12 21	0 29	2 41
S 20	20 21	13 51	4 55	23 35	1 7	22 39	0 47	24 33	4 21	19 2	0 29	20 19	1 44	12 21	0 29	2 42
M21	20 8	17 41	4 26	23 29	1 13	22 41	0 44	24 39	4 21	18 58	0 30	20 20	1 44	12 21	0 29	2 42
T 22	19 55	20 50	3 44	23 22	1 18	22 42	0 41	24 44	4 22	18 55	0 30	20 21	1 44	12 21	0 29	2 42
W23	19 42	23 5	2 51	23 14	1 23	22 42	0 39	24 49	4 22	18 51	0 30	20 21	1 44	12 21	0 28	2 43
T 24	19 28	24 13	1 48	23 4	1 28	22 42	0 36	24 54	4 23	18 48	0 30	20 22	1 44	12 22	0 28	2 43
F 25	19 14	24 0	0 37	22 52	1 33	22 42	0 33	24 59	4 23	18 44	0 30	20 23	1 45	12 22	0 28	2 43
S 26	18 59	22 22	0n38	22 40	1 37	22 40	0 30	25 4	4 23	18 41	0 30	20 23	1 45	12 22	0 28	2 44
S 27	18 44	19 18	1 53	22 26	1 41	22 38	0 27	25 8	4 23	18 37	0 30	20 24	1 45	12 22	0 28	2 44
M28	18 29	15 0	3 2	22 10	1 45	22 35	0 25	25 13	4 23	18 33	0 30	20 25	1 45	12 23	0 28	2 45
T 29	18 13	9 44	4 0	21 53	1 49	22 32	0 22	25 17	4 22	18 30	0 30	20 25	1 45	12 23	0 28	2 45
W30	17 57	3 52	4 43	21 35	1 52	22 27	0 19	25 20	4 22	18 26	0 30	20 26	1 45	12 23	0 28	2 45
T 31	17s41	2n11	5n 6	21s15	1s55	22s22	0n16	25n24	4n21	18s22	0s30	20s26	1n45	12n24	0s28	2n46

Julian Day Number = 2489529.5, Delta T = 95.06 sec  
Ecliptic obliquity = 23°25'33", Nutation = 0°00'18", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 26°11'36", Lahiri = 25°18'36"

# ASTRODIENST EPHEMERIS for the year 2104

## geocentric

FEBRUARY 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 41 22	11 <sup>11</sup> 15	8 <sup>24</sup> 24	5 <sup>22</sup> 2	15 <sup>3</sup> 41	24 <sup>2</sup> R42	9 <sup>39</sup> 39	11 <sup>17</sup> 45	4 <sup>8</sup> 0	25 <sup>2</sup> R47	6 <sup>15</sup> 15	3 <sup>0</sup> R19	1 <sup>3</sup> 59	28 <sup>24</sup> 24	16 <sup>3</sup> 7	F 1
S 2	8 45 19	12 <sup>12</sup> 12	22 <sup>5</sup> 51	6 <sup>4</sup> 41	16 <sup>5</sup> 56	24 <sup>2</sup> 22	9 <sup>54</sup> 54	11 <sup>15</sup> 50	4 <sup>1</sup> 1	25 <sup>2</sup> 46	6 <sup>15</sup> 15	3 <sup>15</sup> 15	1 <sup>56</sup> 56	28 <sup>30</sup> 30	16 <sup>12</sup> 12	S 2
S 3	8 49 15	13 <sup>13</sup> 07	6 <sup>5</sup> 59	8 <sup>22</sup> 22	18 <sup>11</sup> 11	24 <sup>2</sup> 2	10 <sup>8</sup> 8	11 <sup>55</sup> 55	4 <sup>2</sup> 2	25 <sup>4</sup> 45	6 <sup>15</sup> 15	3 <sup>0</sup> D14	1 <sup>53</sup> 53	28 <sup>37</sup> 37	16 <sup>18</sup> 18	S 3
M 4	8 53 12	14 <sup>14</sup> 02	20 <sup>4</sup> 48	10 <sup>3</sup> 3	19 <sup>25</sup> 25	23 <sup>44</sup> 44	10 <sup>22</sup> 22	11 <sup>59</sup> 59	4 <sup>3</sup> 3	25 <sup>4</sup> 44	6 <sup>16</sup> 16	3 <sup>14</sup> 14	1 <sup>50</sup> 50	28 <sup>44</sup> 44	16 <sup>23</sup> 23	M 4
T 5	8 57 8	15 <sup>14</sup> 55	4 <sup>11</sup> 11	11 <sup>44</sup> 44	20 <sup>40</sup> 40	23 <sup>25</sup> 25	10 <sup>36</sup> 36	12 <sup>4</sup> 4	4 <sup>4</sup> 4	25 <sup>4</sup> 43	6 <sup>16</sup> 16	3 <sup>15</sup> 15	1 <sup>47</sup> 47	28 <sup>50</sup> 50	16 <sup>29</sup> 29	T 5
W 6	9 1 5	16 <sup>15</sup> 46	17 <sup>3</sup> 32	13 <sup>27</sup> 27	21 <sup>54</sup> 54	23 <sup>8</sup> 8	10 <sup>50</sup> 50	12 <sup>8</sup> 8	4 <sup>6</sup> 6	25 <sup>4</sup> 41	6 <sup>16</sup> 16	3 <sup>16</sup> 16	1 <sup>43</sup> 43	28 <sup>57</sup> 57	16 <sup>34</sup> 34	W 6
T 7	9 5 2	17 <sup>16</sup> 37	0 <sup>30</sup> 30	15 <sup>10</sup> 10	23 <sup>9</sup> 9	22 <sup>51</sup> 51	11 <sup>5</sup> 5	12 <sup>12</sup> 12	4 <sup>7</sup> 7	25 <sup>4</sup> 40	6 <sup>17</sup> 17	3 <sup>0</sup> R17	1 <sup>40</sup> 40	29 <sup>4</sup> 4	16 <sup>40</sup> 40	T 7
F 8	9 8 58	18 <sup>17</sup> 26	13 <sup>15</sup> 15	16 <sup>54</sup> 54	24 <sup>24</sup> 24	22 <sup>35</sup> 35	11 <sup>19</sup> 19	12 <sup>16</sup> 16	4 <sup>8</sup> 8	25 <sup>3</sup> 39	6 <sup>17</sup> 17	3 <sup>17</sup> 17	1 <sup>37</sup> 37	29 <sup>11</sup> 11	16 <sup>45</sup> 45	F 8
S 9	9 12 55	19 <sup>18</sup> 13	25 <sup>49</sup> 49	18 <sup>39</sup> 39	25 <sup>38</sup> 38	22 <sup>20</sup> 20	11 <sup>33</sup> 33	12 <sup>20</sup> 20	4 <sup>10</sup> 10	25 <sup>3</sup> 38	6 <sup>18</sup> 18	3 <sup>14</sup> 14	1 <sup>34</sup> 34	29 <sup>17</sup> 17	16 <sup>50</sup> 50	S 9
S 10	9 16 51	20 <sup>19</sup> 00	8 <sup>13</sup> 13	20 <sup>24</sup> 24	26 <sup>53</sup> 53	22 <sup>5</sup> 5	11 <sup>47</sup> 47	12 <sup>25</sup> 25	4 <sup>11</sup> 11	25 <sup>3</sup> 37	6 <sup>18</sup> 18	3 <sup>9</sup> 9	1 <sup>31</sup> 31	29 <sup>24</sup> 24	16 <sup>56</sup> 56	S 10
M 11	9 20 48	21 <sup>19</sup> 44	20 <sup>28</sup> 28	22 <sup>10</sup> 10	28 <sup>8</sup> 8	21 <sup>51</sup> 51	12 <sup>1</sup> 1	12 <sup>28</sup> 28	4 <sup>12</sup> 12	25 <sup>3</sup> 35	6 <sup>19</sup> 19	3 <sup>2</sup> 2	1 <sup>28</sup> 28	29 <sup>31</sup> 31	17 <sup>1</sup> 1	M 11
T 12	9 24 44	22 <sup>20</sup> 28	2 <sup>36</sup> 36	23 <sup>57</sup> 57	29 <sup>22</sup> 22	21 <sup>38</sup> 38	12 <sup>15</sup> 15	12 <sup>32</sup> 32	4 <sup>14</sup> 14	25 <sup>3</sup> 34	6 <sup>19</sup> 19	2 <sup>53</sup> 53	1 <sup>24</sup> 24	29 <sup>38</sup> 38	17 <sup>6</sup> 6	T 12
W 13	9 28 41	23 <sup>21</sup> 10	14 <sup>37</sup> 37	25 <sup>45</sup> 45	0 <sup>37</sup> 37	21 <sup>26</sup> 26	12 <sup>30</sup> 30	12 <sup>36</sup> 36	4 <sup>16</sup> 16	25 <sup>3</sup> 33	6 <sup>19</sup> 19	2 <sup>43</sup> 43	1 <sup>21</sup> 21	29 <sup>44</sup> 44	17 <sup>11</sup> 11	W 13
T 14	9 32 37	24 <sup>21</sup> 51	26 <sup>32</sup> 32	27 <sup>33</sup> 33	1 <sup>52</sup> 52	21 <sup>14</sup> 14	12 <sup>44</sup> 44	12 <sup>40</sup> 40	4 <sup>17</sup> 17	25 <sup>3</sup> 31	6 <sup>20</sup> 20	2 <sup>33</sup> 33	1 <sup>18</sup> 18	29 <sup>51</sup> 51	17 <sup>16</sup> 16	T 14
F 15	9 36 34	25 <sup>22</sup> 31	8 <sup>25</sup> 25	29 <sup>22</sup> 22	3 <sup>6</sup> 6	21 <sup>4</sup> 4	12 <sup>58</sup> 58	12 <sup>43</sup> 43	4 <sup>19</sup> 19	25 <sup>3</sup> 30	6 <sup>21</sup> 21	2 <sup>23</sup> 23	1 <sup>15</sup> 15	29 <sup>58</sup> 58	17 <sup>22</sup> 22	F 15
S 16	9 40 31	26 <sup>23</sup> 10	20 <sup>16</sup> 16	1 <sup>11</sup> 11	4 <sup>21</sup> 21	20 <sup>54</sup> 54	13 <sup>12</sup> 12	12 <sup>47</sup> 47	4 <sup>21</sup> 21	25 <sup>2</sup> 28	6 <sup>21</sup> 21	2 <sup>15</sup> 15	1 <sup>12</sup> 12	0 <sup>4</sup> 4	17 <sup>27</sup> 27	S 16
S 17	9 44 27	27 <sup>23</sup> 48	2 <sup>10</sup> 10	3 <sup>1</sup> 1	5 <sup>36</sup> 36	20 <sup>44</sup> 44	13 <sup>26</sup> 26	12 <sup>50</sup> 50	4 <sup>22</sup> 22	25 <sup>2</sup> 27	6 <sup>22</sup> 22	2 <sup>9</sup> 9	1 <sup>8</sup> 8	0 <sup>11</sup> 11	17 <sup>32</sup> 32	S 17
M 18	9 48 24	28 <sup>24</sup> 24	14 <sup>10</sup> 10	4 <sup>52</sup> 52	6 <sup>50</sup> 50	20 <sup>36</sup> 36	13 <sup>40</sup> 40	12 <sup>54</sup> 54	4 <sup>24</sup> 24	25 <sup>2</sup> 26	6 <sup>22</sup> 22	2 <sup>6</sup> 6	1 <sup>5</sup> 5	0 <sup>18</sup> 18	17 <sup>37</sup> 37	M 18
T 19	9 52 20	29 <sup>24</sup> 59	26 <sup>21</sup> 21	6 <sup>42</sup> 42	8 <sup>5</sup> 5	20 <sup>28</sup> 28	13 <sup>54</sup> 54	12 <sup>57</sup> 57	4 <sup>26</sup> 26	25 <sup>2</sup> 24	6 <sup>23</sup> 23	2 <sup>0</sup> D 5	1 <sup>2</sup> 2	0 <sup>25</sup> 25	17 <sup>42</sup> 42	T 19
W 20	9 56 17	0 <sup>25</sup> 33	8 <sup>48</sup> 48	8 <sup>33</sup> 33	9 <sup>20</sup> 20	20 <sup>22</sup> 22	14 <sup>8</sup> 8	13 <sup>0</sup> 0	4 <sup>28</sup> 28	25 <sup>2</sup> 23	6 <sup>24</sup> 24	2 <sup>5</sup> 5	0 <sup>59</sup> 59	0 <sup>31</sup> 31	17 <sup>46</sup> 46	W 20
T 21	10 0 13	1 <sup>26</sup> 06	21 <sup>36</sup> 36	10 <sup>24</sup> 24	9 <sup>34</sup> 34	20 <sup>16</sup> 16	14 <sup>22</sup> 22	13 <sup>3</sup> 3	4 <sup>30</sup> 30	25 <sup>2</sup> 21	6 <sup>24</sup> 24	2 <sup>6</sup> 6	0 <sup>56</sup> 56	0 <sup>38</sup> 38	17 <sup>51</sup> 51	T 21
F 22	10 4 10	2 <sup>26</sup> 38	4 <sup>3</sup> 49	12 <sup>15</sup> 15	11 <sup>49</sup> 49	20 <sup>10</sup> 10	14 <sup>36</sup> 36	13 <sup>6</sup> 6	4 <sup>32</sup> 32	25 <sup>2</sup> 20	6 <sup>25</sup> 25	2 <sup>0</sup> R 6	0 <sup>53</sup> 53	0 <sup>45</sup> 45	17 <sup>56</sup> 56	F 22
S 23	10 8 6	3 <sup>27</sup> 08	18 <sup>30</sup> 30	14 <sup>6</sup> 6	13 <sup>4</sup> 4	20 <sup>6</sup> 6	14 <sup>49</sup> 49	13 <sup>9</sup> 9	4 <sup>34</sup> 34	25 <sup>1</sup> 18	6 <sup>26</sup> 26	2 <sup>5</sup> 5	0 <sup>49</sup> 49	0 <sup>52</sup> 52	18 <sup>1</sup> 1	S 23
S 24	10 12 3	4 <sup>27</sup> 37	2 <sup>41</sup> 41	15 <sup>56</sup> 56	14 <sup>18</sup> 18	20 <sup>2</sup> 2	15 <sup>3</sup> 3	13 <sup>12</sup> 12	4 <sup>36</sup> 36	25 <sup>1</sup> 17	6 <sup>26</sup> 26	2 <sup>1</sup> 1	0 <sup>46</sup> 46	0 <sup>58</sup> 58	18 <sup>5</sup> 5	S 24
M 25	10 16 0	5 <sup>28</sup> 04	17 <sup>18</sup> 18	17 <sup>45</sup> 45	15 <sup>33</sup> 33	20 <sup>0</sup> 0	15 <sup>17</sup> 17	13 <sup>15</sup> 15	4 <sup>38</sup> 38	25 <sup>1</sup> 15	6 <sup>27</sup> 27	1 <sup>55</sup> 55	0 <sup>43</sup> 43	1 <sup>5</sup> 5	18 <sup>10</sup> 10	M 25
T 26	10 19 56	6 <sup>28</sup> 30	2 <sup>17</sup> 17	19 <sup>32</sup> 32	16 <sup>48</sup> 48	19 <sup>57</sup> 57	15 <sup>31</sup> 31	13 <sup>18</sup> 18	4 <sup>40</sup> 40	25 <sup>1</sup> 14	6 <sup>28</sup> 28	1 <sup>47</sup> 47	0 <sup>40</sup> 40	1 <sup>12</sup> 12	18 <sup>15</sup> 15	T 26
W 27	10 23 53	7 <sup>28</sup> 54	17 <sup>29</sup> 29	21 <sup>19</sup> 19	18 <sup>2</sup> 2	19 <sup>56</sup> 56	15 <sup>45</sup> 45	13 <sup>20</sup> 20	4 <sup>42</sup> 42	25 <sup>1</sup> 12	6 <sup>29</sup> 29	1 <sup>37</sup> 37	0 <sup>37</sup> 37	1 <sup>18</sup> 18	18 <sup>19</sup> 19	W 27
T 28	10 27 49	8 <sup>29</sup> 16	2 <sup>43</sup> 43	23 <sup>3</sup> 3	19 <sup>17</sup> 17	19 <sup>0</sup> D56	15 <sup>58</sup> 58	13 <sup>23</sup> 23	4 <sup>44</sup> 44	25 <sup>1</sup> 11	6 <sup>29</sup> 29	1 <sup>26</sup> 26	0 <sup>33</sup> 33	1 <sup>25</sup> 25	18 <sup>24</sup> 24	T 28
F 29	10 31 46	9 <sup>29</sup> 37	17 <sup>47</sup> 47	24 <sup>11</sup> 11	20 <sup>32</sup> 32	19 <sup>56</sup> 56	16 <sup>12</sup> 12	13 <sup>25</sup> 25	4 <sup>47</sup> 47	25 <sup>1</sup> 9	6 <sup>30</sup> 30	1 <sup>3</sup> 17	0 <sup>30</sup> 30	1 <sup>4</sup> 4	18 <sup>28</sup> 28	F 29

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
F 1	17s25	8n 4	5n 9	20s54	1s57	22s17	0n13	25n27	4n21	18s19	0s30	20s27	1n45	12n24	0s28	2n46	1n12	2s 1	16s30	23s23	23s25	4s 4	16s18	6n12							
S 2	17 8	13 24	4 53	20 31	2 0	22 11	0 11	25 30	4 20	18 15	0 31	20 27	1 45	12 25	0 28	2 47	1 12	2 1	16 30	23 23	23 25	4 7	16 17	6 12							
S 3	16 50	17 54	4 19	20 7	2 2	22 4	0 8	25 33	4 20	18 11	0 31	20 28	1 45	12 25	0 28	2 47	1 12	2 1	16 30	23 23	23 25	4 10	16 16	6 13							
M 4	16 33	21 19	3 30	19 42	2 3	21 56	0 5	25 35	4 19	18 7	0 31	20 28	1 45	12 25	0 28	2 48	1 12	2 0	16 29	23 23	23 25	4 13	16 15	6 13							
T 5	16 15	23 28	2 31	19 15	2 4	21 48	0 2	25 38	4 18	18 4	0 31	20 29	1 46	12 26	0 28	2 48	1 12	2 0	16 29	23 23	23 25	4 15	16 14	6 13							
W 6	15 57	24 14	1 24	18 46	2 5	21 39	0s 0	25 40	4 17	18 0	0 31	20 29	1 46	12 26	0 28	2 49	1 12	1 59	16 29	23 23	23 25	4 18	16 13	6 14							
T 7	15 39	23 41	0 15	18 16	2 5	21 30	0 3	25 42	4 16	17 56	0 31	20 30	1 46	12 27	0 28	2 49	1 12	1 59	16 28	23 23	23 25	4 21	16 12	6 14							
F 8	15 20	21 53	0s54	17 45	2 5	21 19	0 6	25 43	4 15	17 52	0 31	20 30	1 46	12 27	0 28	2 50	1 12	1 58	16 28	23 23	23 25	4 23	16 11	6 14							
S 9	15 1	19 2	1 59	17 12	2 5	21 9	0 9	25 45	4 13	17 48	0 31	20 31	1 46	12 28	0 28	2 50	1 12	1 58	16 28	23 23	23 25	4 26	16 10	6 14							
S 10	14 42	15 21	2 57	16 38	2 4	20 57	0 11	25 46	4 12	17 45	0 31	20 31	1 46	12 28	0 28	2 51	1 12	1 57	16 27	23 23	23 25	4 29	16 9	6 15							
M 11	14 23	11 5	3 46	16 2	2 2	20 45	0 14	25 47	4 11	17 41	0 31	20 31	1 46	12 29	0 28	2 51	1 12	1 57	16 27	23 23	23 25	4 31	16 8	6 15							
T 12	14 3	6 26	4 25	15 25	2 0	20 32	0 16	25 47	4 9	17 37	0 31	20 32	1 46	12 29	0 28	2 52	1 12	1 57	16 26	23 24	23 25	4 34	16 7	6 15							
W 13	13 44	1 35	4 51	14 47	1 58	20 19	0 19	25 48	4 8	17 33	0 32	20 32	1 46	12 30	0 28	2 52	1 12	1 56	16 26	23 24	23 25	4 37	16 7	6 16							
T 14	13 24	3s16	5 4	14 7	1 55	20 5	0 22	25 48	4 7	17 29	0 32	20 32	1 47	12 30	0 28	2 53	1 12	1 56	16 26	23 24	23 25	4 40	16 6	6 16							
F 15	13 3	7 59	5 4	13 25	1 51	19 51	0 24	25 49	4 5	17 25	0 32	20 33	1 47	12 31	0 28	2 54	1 12	1 55	16 25	23 24	23 25	4 42	16 5	6 16							
S 16	12 43	12 24	4 51	12 43	1 47	19 36	0 27	25 49	4 3	17 21	0 32	20 33	1 47	12 31	0 28	2 54	1 12	1 55	16 25	23 24	23 25	4 45	16 4	6 17							
S 17	12 22	16 22	4 25	11 59	1 42	19 20	0 29	25 49	4 2	17 18	0 32	20 33	1 47	12 32	0 28	2 55	1 12	1 54	16 25	23 24	23 25	4 48	16 3	6 17							
M 18	12 1	19 42	3 48	11 14	1 37	19 4	0 32	25 48	4 0	17 14	0 32	20 34	1 47	12 33	0 28	2 55	1 12	1 54	16 24	23 25	23 25	4 50	16 2	6 17							
T 19	11 40	22 14	2 59	10 28	1 31	18 47	0 34	25 48	3 58	17 10	0 32	20 34	1 47	12 33	0 28	2 56	1 12	1 53	16 24	23 25	23 25	4 53	16 1	6 18							
W 20	11 19	23 45	2 1	9 40	1 25	18 30	0 36	25 47	3 57	17 6	0 32	20 34	1 47	12 34	0 28	2 57	1 12	1 53	16 24	23 25	23 25	4 56	16 0	6 18							
T 21	10 58	24 5	0 56	8 52	1 18	18 12	0 39	25 46	3 55	17 2	0 32	20 35	1 47	12 35	0 28	2 57	1 12	1 52	16 23	23 25	23 25	4 58	15 59	6 19							
F 22	10 36	23 6	0n14	8 2	1 10	17 53	0 41	25 45	3 53	16 58	0 33	20 35	1 48	12 35	0 28	2 58	1 12	1 52	16 23	23 25	23 25	5 1	15 58	6 19							
S 23	10 14	20 43	1 26	7 12	1 1	17 35	0 43	25 44	3 52	16 54	0 33	20 35	1 48	12 36	0 28	2 58	1 12	1 51	16 23	23 25	23 25	5 4	15 57	6 19							
S 24	9 52	17 2	2 35	6 21	0 52	17 15	0 45	25 43	3 50	16 50	0 33	20 35	1 48	12 37	0 28	2 59	1 12	1 51	16 23	23 25	23 25	5 6	15 56	6 20							
M 25	9 30	12 12	3 36	5 30	0 43	16 55	0 48	25 42	3 48	16 46	0 33	20 36	1 48	12 38	0 28	3 0	1 12	1 50	16 22	23 25	23 25	5 9	15 55	6 20							
T 26	9 8	6 33	4 24	4 38	0 32	16 35	0 50	25 40	3 46	16 42	0 33	20 36	1 48	12 38	0 27	3 0	1 12	1 49	16 22	23 25	23 25	5 12	15 54	6 21							
W 27	8 45	0 26	4 53	3 46	0 21	16 14	0 52	25 39	3 44	16 38	0 33	20 36	1 48	12 39	0 27	3 1	1 13	1 49	16 22	23 25	23 25	5 14	15 53	6 21							
T 28	8 23	5n42	5 2	2 55	0 10	15 53	0 54	25 37	3 42	16 34	0 33	20 36	1 48	12 40	0 27	3 2	1 13	1 48	16 21	23 25	23 25	5 17	15 52	6 22							
F 29	8s 0	11n27	4n50	2s 3	0n 2	15s31	0s56	25n35	3n40	16s30	0s33	20s36	1n48	12n41	0s27	3n 2	1n13	1s48	16s21	23s25	23s25	5s20	15s51	6n22							

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

MARCH 2104

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	10 35 42	10♉29'56	2♊34	26♋23	21♌46	19♍57	16♎26	13♏27	4♐49	25°R 7	6♑31	1°R10	0♒27	1♓39	18♈32	S 1
S 2	10 39 39	11°30'12	16°57	27°57	23° 1	19°58	16°39	13°29	4°51	25♑ 6	6°32	1♒ 5	0°24	1°45	18°37	S 2
M 3	10 43 35	12°30'27	0♊54	29°28	24°16	20° 1	16°53	13°31	4°54	25° 4	6°33	1° 3	0°21	1°52	18°41	M 3
T 4	10 47 32	13°30'40	14°25	0♋54	25°30	20° 4	17° 6	13°33	4°56	25° 3	6°34	1°D 2	0°18	1°59	18°45	T 4
W 5	10 51 29	14°30'50	27°32	2°15	26°45	20° 8	17°20	13°35	4°59	25° 1	6°34	1°R 2	0°14	2° 5	18°49	W 5
T 6	10 55 25	15°30'59	10♌20	3°29	28° 0	20°12	17°33	13°37	5° 1	24°59	6°35	1° 2	0°11	2°12	18°53	T 6
F 7	10 59 22	16°31'05	22°52	4°38	29°14	20°17	17°47	13°39	5° 4	24°58	6°36	1° 0	0° 8	2°19	18°57	F 7
S 8	11 3 18	17°31'09	5♌12	5°39	0♉29	20°23	18° 0	13°40	5° 6	24°56	6°37	0°56	0° 5	2°26	19° 1	S 8
S 9	11 7 15	18°31'12	17°22	6°32	1°43	20°30	18°13	13°42	5° 9	24°54	6°38	0°48	0° 2	2°32	19° 5	S 9
M10	11 11 11	19°31'12	29°26	7°18	2°58	20°37	18°26	13°43	5°11	24°53	6°39	0°38	29♊59	2°39	19° 9	M10
T 11	11 15 8	20°31'10	11♑25	7°56	4°13	20°45	18°40	13°44	5°14	24°51	6°40	0°25	29°55	2°46	19°13	T 11
W12	11 19 4	21°31'06	23°20	8°24	5°27	20°53	18°53	13°46	5°17	24°49	6°41	0°11	29°52	2°53	19°16	W12
T 13	11 23 1	22°31'00	5♌14	8°44	6°42	21° 2	19° 6	13°47	5°19	24°48	6°42	29♊56	29°49	2°59	19°20	T 13
F 14	11 26 57	23°30'53	17° 6	8°56	7°56	21°11	19°19	13°48	5°22	24°46	6°43	29°43	29°46	3° 6	19°23	F 14
S 15	11 30 54	24°30'43	28°59	8°R58	9°11	21°21	19°32	13°48	5°25	24°44	6°44	29°31	29°43	3°13	19°27	S 15
S 16	11 34 51	25°30'32	10♍55	8°52	10°25	21°32	19°45	13°49	5°28	24°43	6°45	29°21	29°39	3°19	19°30	S 16
M17	11 38 47	26°30'19	22°57	8°38	11°40	21°43	19°57	13°50	5°30	24°41	6°46	29°15	29°36	3°26	19°34	M17
T 18	11 42 44	27°30'05	5♊ 8	8°16	12°55	21°55	20°10	13°50	5°33	24°39	6°48	29°12	29°33	3°33	19°37	T 18
W19	11 46 40	28°29'48	17°32	7°46	14° 9	22° 7	20°23	13°51	5°36	24°38	6°49	29°10	29°30	3°40	19°40	W19
T 20	11 50 37	29°29'30	0♒15	7°10	15°24	22°20	20°36	13°51	5°39	24°36	6°50	29°10	29°27	3°46	19°43	T 20
F 21	11 54 33	0♋29'11	13°21	6°28	16°38	22°33	20°48	13°52	5°42	24°34	6°51	29°10	29°24	3°53	19°46	F 21
S 22	11 58 30	1°28'49	26°54	5°42	17°53	22°47	21° 1	13°52	5°45	24°33	6°52	29° 8	29°20	4° 0	19°49	S 22
S 23	12 2 26	2°28'26	10♎56	4°52	19° 7	23° 1	21°13	13°R52	5°48	24°31	6°53	29° 5	29°17	4° 7	19°52	S 23
M24	12 6 23	3°28'01	25°27	4° 0	20°22	23°16	21°25	13°52	5°51	24°29	6°54	28°58	29°14	4°13	19°55	M24
T 25	12 10 20	4°27'34	10♉23	3° 6	21°36	23°31	21°38	13°52	5°54	24°28	6°56	28°49	29°11	4°20	19°58	T 25
W26	12 14 16	5°27'05	25°37	2°13	22°51	23°47	21°50	13°51	5°57	24°26	6°57	28°38	29° 8	4°27	20° 1	W26
T 27	12 18 13	6°26'34	10♋58	1°20	24° 5	24° 3	22° 2	13°51	6° 0	24°25	6°58	28°27	29° 5	4°33	20° 3	T 27
F 28	12 22 9	7°26'02	26°15	0°29	25°20	24°20	22°14	13°51	6° 3	24°23	6°59	28°16	29° 1	4°40	20° 6	F 28
S 29	12 26 6	8°25'27	11♌16	29♉41	26°34	24°37	22°26	13°50	6° 7	24°21	7° 0	28° 8	28°58	4°47	20° 8	S 29
S 30	12 30 2	9°24'50	25°53	28°57	27°49	24°54	22°38	13°49	6°10	24°20	7° 2	28° 2	28°55	4°54	20°11	S 30
M31	12 33 59	10♋24'10	10♊ 2	28♉17	29♋ 3	25♌12	22♎50	13♏49	6♐13	24♑18	7♒ 3	27♊59	28♋52	5♌ 0	20♈13	M31

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	decl	lat
S 1	7s38	16n24	4n19	1s13	0n15	15s 9	0s58	25n33	3n39	16s26	0s33	20s36	1n49	12n41	0s27	3n 3	1n13	1s47	16s21	23s25	23s26	5s22	15s50	6n22									
S 2	7 15	20 16	3 31	0 23	0 28	14 46	1 0	25 31	3 37	16 22	0 34	20 37	1 49	12 42	0 27	3 4	1 13	1 47	16 20	23 25	23 26	5 25	15 49	6 23									
M 3	6 52	22 49	2 33	0n26	0 42	14 23	1 1	25 29	3 35	16 18	0 34	20 37	1 49	12 43	0 27	3 4	1 13	1 46	16 20	23 25	23 26	5 28	15 48	6 23									
T 4	6 29	23 57	1 27	1 12	0 55	14 0	1 3	25 26	3 33	16 14	0 34	20 37	1 49	12 44	0 27	3 5	1 13	1 46	16 20	23 25	23 26	5 30	15 47	6 24									
W 5	6 6	23 43	0 19	1 57	1 9	13 36	1 5	25 24	3 31	16 10	0 34	20 37	1 49	12 45	0 27	3 5	1 13	1 45	16 20	23 25	23 26	5 33	15 46	6 24									
T 6	5 42	22 12	0s49	2 40	1 24	13 12	1 6	25 21	3 29	16 6	0 34	20 37	1 49	12 46	0 27	3 6	1 13	1 45	16 19	23 25	23 26	5 36	15 45	6 25									
F 7	5 19	19 38	1 53	3 20	1 38	12 48	1 8	25 19	3 27	16 2	0 34	20 37	1 49	12 46	0 27	3 7	1 13	1 44	16 19	23 25	23 26	5 38	15 44	6 25									
S 8	4 56	16 12	2 50	3 57	1 51	12 23	1 10	25 16	3 25	15 58	0 34	20 37	1 49	12 47	0 27	3 7	1 13	1 44	16 19	23 25	23 26	5 41	15 43	6 26									
S 9	4 32	12 9	3 39	4 31	2 5	11 58	1 11	25 13	3 24	15 54	0 34	20 37	1 50	12 48	0 27	3 8	1 13	1 43	16 18	23 25	23 26	5 44	15 42	6 26									
M10	4 9	7 39	4 17	5 1	2 18	11 32	1 13	25 10	3 22	15 50	0 35	20 37	1 50	12 49	0 27	3 9	1 13	1 42	16 18	23 25	23 26	5 46	15 41	6 27									
T 11	3 45	2 54	4 43	5 27	2 31	11 6	1 14	25 7	3 20	15 46	0 35	20 37	1 50	12 50	0 27	3 9	1 13	1 42	16 18	23 26	23 26	5 49	15 40	6 27									
W12	3 22	1s55	4 57	5 49	2 43	10 40	1 15	25 4	3 18	15 43	0 35	20 37	1 50	12 51	0 27	3 10	1 13	1 41	16 18	23 26	23 26	5 51	15 39	6 28									
T 13	2 58	6 38	4 58	6 7	2 54	10 14	1 16	25 1	3 16	15 39	0 35	20 37	1 50	12 52	0 27	3 11	1 13	1 41	16 17	23 26	23 26	5 54	15 38	6 28									
F 14	2 34	11 7	4 46	6 21	3 4	9 47	1 18	24 57	3 14	15 35	0 35	20 37	1 50	12 53	0 27	3 12	1 13	1 40	16 17	23 26	23 26	5 57	15 37	6 29									
S 15	2 11	15 11	4 21	6 30	3 12	9 20	1 19	24 54	3 13	15 31	0 35	20 37	1 50	12 54	0 27	3 12	1 13	1 40	16 17	23 26	23 26	5 59	15 36	6 29									
S 16	1 47	18 39	3 45	6 34	3 20	8 53	1 20	24 51	3 11	15 27	0 35	20 37	1 50	12 55	0 27	3 13	1 13	1 39	16 17	23 25	23 26	6 2	15 35	6 30									
M17	1 23	21 23	2 59	6 34	3 26	8 26	1 21	24 47	3 9	15 23	0 36	20 37	1 51	12 56	0 27	3 14	1 13	1 39	16 16	23 25	23 26	6 5	15 34	6 30									
T 18	1 0	23 10	2 3	6 29	3 30	7 58	1 22	24 43	3 7	15 19	0 36	20 37	1 51	12 57	0 27	3 14	1 13	1 38	16 16	23 25	23 26	6 7	15 33	6 31									
W19	0 36	23 51	1 1	6 20	3 32	7 30	1 23	24 40	3 5	15 15	0 36	20 37	1 51	12 58	0 27	3 15	1 13	1 37	16 16	23 25	23 25	6 10	15 32	6 31									
T 20	0 12	23 20	0n 6	6 6	3 33	7 2	1 23	24 36	3 4	15 11	0 36	20 37	1 51	12 59	0 27	3 16	1 13	1 37	16 16	23 25	23 25	6 12	15 31	6 32									
F 21	0n12	21 32	1 14	5 48	3 31	6 34	1 24	24 32	3 2	15 7	0 36	20 37	1 51	13 0	0 27	3 16	1 13	1 36	16 16	23 25	23 25	6 15	15 30	6 32									
S 22	0 35	18 28	2 21	5 27	3 28	6 5	1 25	24 28	3 0	15 4	0 36	20 37	1 51	13 1	0 27	3 17	1 13	1 36	16 15	23 25	23 25	6 18	15 29	6 33									
S 23	0 59	14 15	3 21	5 3	3 23	5 37	1 25	24 24	2 58	15 0	0 36	20 37	1 51	13 2	0 27	3 17	1 13	1 35	16 15	23 25	23 25	6 20	15 28	6 34									
M24	1 23	9 5	4 11	4 36	3 16	5 8	1 26	24 19	2 57	14 56	0 37	20 36	1 51	13 3	0 27	3 18	1 13	1 35	16 15	23 25	23 25	6 23	15 27	6 34									
T 25	1 46	3 16	4 45	4 6	3 8	4 39	1 26	24 15	2 55	14 52	0 37	20 36	1 52	13 4	0 27	3 19	1 13	1 34	16 15	23 25	23 25	6 25	15 26	6 35									
W26	2 10	2n51	5 0	3 36	2 57	4 10	1 27	24 11	2 53	14 48	0 37	20 36	1 52	13 5	0 27	3 19	1 13	1 34	16 15	23 25	23 25	6 28	15 25	6 35									
T 27	2 33	8 50	4 53	3 4	2 46	3 41	1 27	24 6	2 52	14 44	0 37	20 36	1 52	13 6	0 27	3 20	1 13	1 33	16 14	23 25	23 25	6 31	15 24	6 36									
F 28	2 57	14 15	4 26	2 32	2 33	3 12	1 28	24 2	2 50	14 41	0 37	20 36	1 52	13 7	0 27	3 21	1 13	1 33	16 14	23 25	23 25	6 33	15 23	6 36									
S 29	3 20	18 41	3 40	2 0	2 19	2 42	1 28	23 57	2 48	14 37	0 37	20 36	1 52	13 8	0 27	3 21	1 13	1 32	16 14	23 25	23 25	6 36	15 22	6 37									
S 30	3 44	21 49	2 41	1 29	2 5	2 13	1 28	23 52	2 47	14 33	0 38	20 35	1 52	13 9	0 27	3 22	1 13	1 31	16 14	23 25	23 25	6 38	15 21	6 38									
M31	4n 7	23n29	1n33	0n59	1n49	1s43	1s28	23n47	2n45	14s30	0s38	20s35	1n52	13n10	0s27	3n23	1n13	1s31	16s14	23s25	23s25	6s41	15s20	6n38									

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

APRIL 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 55	11°23'29"	23°41'	27°R41	0°Y17	25°30	23°32	13°R48	6°B16	24°R16	7°B 4	27°D58	28°R49	5°B 7	20°B15	T 1
W 2	12 41 52	12°22'45"	6°54'	27°K11	1°32	25°49	23°13	13°R47	6°19	24°R15	7° 5	27°R58	28°45	5°14	20°17	W 2
T 3	12 45 49	13°21'58"	19°42'	26°46	2°46	26° 8	23°25	13°46	6°23	24°13	7° 7	27°R58	28°42	5°20	20°19	T 3
F 4	12 49 45	14°21'10"	2°12	26°27	4° 1	26°27	23°36	13°45	6°26	24°12	7° 8	27°57	28°39	5°27	20°21	F 4
S 5	12 53 42	15°20'19"	14°26	26°14	5°15	26°47	23°48	13°44	6°29	24°10	7° 9	27°53	28°36	5°34	20°23	S 5
S 6	12 57 38	16°19'25"	26°30	26° 6	6°29	27° 7	23°59	13°42	6°32	24° 9	7°10	27°47	28°33	5°41	20°25	S 6
M 7	13 1 35	17°18'30"	8°28	26°D 4	7°44	27°27	24°10	13°41	6°36	24° 7	7°12	27°38	28°30	5°47	20°27	M 7
T 8	13 5 31	18°17'32"	20°21	26° 7	8°58	27°48	24°21	13°39	6°39	24° 6	7°13	27°27	28°26	5°54	20°28	T 8
W 9	13 9 28	19°16'32"	2°13	26°15	10°12	28° 9	24°32	13°38	6°42	24° 4	7°14	27°14	28°23	6° 1	20°30	W 9
T 10	13 13 24	20°15'30"	14° 6	26°29	11°26	28°31	24°43	13°36	6°46	24° 3	7°16	27° 1	28°20	6° 8	20°31	T 10
F 11	13 17 21	21°14'26"	26° 0	26°48	12°41	28°52	24°54	13°34	6°49	24° 1	7°17	26°49	28°17	6°14	20°33	F 11
S 12	13 21 18	22°13'20"	7°15	27°11	13°55	29°14	25° 5	13°32	6°52	24° 0	7°18	26°39	28°14	6°21	20°34	S 12
S 13	13 25 14	23°12'12"	20° 1	27°39	15° 9	29°37	25°15	13°30	6°56	23°59	7°20	26°31	28°10	6°28	20°36	S 13
M14	13 29 11	24°11'02"	2°10	28°11	16°23	29°59	25°26	13°28	6°59	23°57	7°21	26°25	28° 7	6°34	20°37	M14
T 15	13 33 7	25° 9'51"	14°28	28°47	17°38	0°12	25°36	13°26	7° 2	23°56	7°22	26°22	28° 4	6°41	20°38	T 15
W16	13 37 4	26° 8'37"	26°58	29°27	18°52	0°46	25°47	13°24	7° 6	23°54	7°24	26°D22	28° 1	6°48	20°39	W16
T 17	13 41 0	27° 7'22"	9°34	0°Y11	20° 6	1° 9	25°57	13°22	7° 9	23°53	7°25	26°22	27°58	6°55	20°40	T 17
F 18	13 44 57	28° 6'05"	22°49	0°58	21°20	1°33	26° 7	13°19	7°13	23°52	7°26	26°R23	27°55	7° 1	20°41	F 18
S 19	13 48 53	29° 4'47"	6°16	1°49	22°35	1°57	26°17	13°17	7°16	23°50	7°28	26°23	27°51	7° 8	20°41	S 19
S 20	13 52 50	0°B 3'27"	20° 8	2°43	23°49	2°21	26°27	13°14	7°20	23°49	7°29	26°21	27°48	7°15	20°42	S 20
M21	13 56 47	1° 2'05"	4°K26	3°40	25° 3	2°46	26°37	13°12	7°23	23°48	7°30	26°17	27°45	7°21	20°43	M21
T 22	14 0 43	2° 0'41"	19° 7	4°40	26°17	3°10	26°46	13° 9	7°26	23°47	7°32	26°11	27°42	7°28	20°43	T 22
W23	14 4 40	2°59'16"	4°Y 7	5°43	27°31	3°35	26°56	13° 6	7°30	23°45	7°33	26° 4	27°39	7°35	20°44	W23
T 24	14 8 36	3°57'49"	19°17	6°48	28°45	4° 1	27° 5	13° 3	7°33	23°44	7°35	25°56	27°36	7°42	20°44	T 24
F 25	14 12 33	4°56'20"	4°B27	7°56	29°59	4°26	27°14	13° 0	7°37	23°43	7°36	25°48	27°32	7°48	20°44	F 25
S 26	14 16 29	5°54'50"	19°26	9° 6	1°B14	4°52	27°24	12°57	7°40	23°42	7°37	25°42	27°29	7°55	20°44	S 26
S 27	14 20 26	6°53'17"	4°B 6	10°19	2°28	5°18	27°33	12°54	7°44	23°41	7°39	25°38	27°26	8° 2	20°45	S 27
M28	14 24 22	7°51'43"	18°21	11°34	3°42	5°44	27°42	12°51	7°47	23°40	7°40	25°36	27°23	8° 8	20°R45	M28
T 29	14 28 19	8°50'06"	2°B 9	12°52	4°56	6°10	27°50	12°48	7°51	23°39	7°41	25°D36	27°20	8°15	20°45	T 29
W30	14 32 16	9°B48'28"	15°B28	14°Y11	6°B10	6°B37	27°59	12°44	7°B54	23°B38	7°B43	25°B37	27°B16	8°B22	20°B44	W30

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
T 1	4n30	23n39	0n23	0n31	1n34	1s14	1s28	23n42	2n43	14s26	0s38	20s35	1n52	13n11	0s27	3n23	1n13	1s30	16s14	23s25	23s25	6s44	15s20	6n39			
W 2	4 53	22 28	0s47	0 4	1 18	0 44	1 28	23 37	2 42	14 22	0 38	20 35	1 53	13 12	0 27	3 24	1 13	1 30	16 13	23 25	23 25	6 46	15 19	6 39			
T 3	5 16	20 7	1 52	0s20	1 2	0 15	1 28	23 32	2 40	14 19	0 38	20 34	1 53	13 13	0 27	3 24	1 13	1 29	16 13	23 25	23 25	6 49	15 18	6 40			
F 4	5 39	16 53	2 51	0 42	0 46	0n15	1 28	23 27	2 39	14 15	0 38	20 34	1 53	13 14	0 27	3 25	1 13	1 29	16 13	23 25	23 25	6 51	15 17	6 40			
S 5	6 2	12 59	3 40	1 2	0 31	0 45	1 27	23 21	2 37	14 11	0 39	20 34	1 53	13 15	0 27	3 26	1 13	1 28	16 13	23 25	23 25	6 54	15 16	6 41			
S 6	6 25	8 37	4 18	1 19	0 15	1 14	1 27	23 16	2 36	14 8	0 39	20 34	1 53	13 16	0 27	3 26	1 13	1 28	16 13	23 24	23 25	6 56	15 15	6 42			
M 7	6 48	3 59	4 45	1 34	0 0	1 44	1 27	23 10	2 34	14 4	0 39	20 33	1 53	13 17	0 27	3 27	1 13	1 27	16 13	23 24	23 25	6 59	15 14	6 42			
T 8	7 10	0s46	4 59	1 46	0s14	2 14	1 26	23 5	2 33	14 1	0 39	20 33	1 53	13 19	0 27	3 27	1 13	1 27	16 12	23 24	23 25	7 2	15 13	6 43			
W 9	7 32	5 29	5 0	1 55	0 28	2 43	1 26	22 59	2 31	13 57	0 39	20 33	1 53	13 20	0 27	3 28	1 13	1 26	16 12	23 24	23 25	7 4	15 13	6 43			
T 10	7 55	9 59	4 48	2 2	0 41	3 13	1 25	22 53	2 30	13 54	0 39	20 33	1 53	13 21	0 27	3 29	1 13	1 26	16 12	23 24	23 25	7 7	15 12	6 44			
F 11	8 17	14 8	4 24	2 6	0 54	3 42	1 25	22 47	2 28	13 50	0 40	20 32	1 54	13 22	0 27	3 29	1 13	1 25	16 12	23 23	23 25	7 9	15 11	6 45			
S 12	8 39	17 45	3 48	2 8	1 6	4 12	1 24	22 41	2 27	13 47	0 40	20 32	1 54	13 23	0 27	3 30	1 13	1 25	16 12	23 23	23 25	7 12	15 10	6 45			
S 13	9 1	20 38	3 1	2 7	1 17	4 41	1 23	22 35	2 25	13 43	0 40	20 32	1 54	13 24	0 27	3 30	1 13	1 24	16 12	23 23	23 25	7 14	15 9	6 46			
M14	9 22	22 38	2 5	2 4	1 28	5 10	1 22	22 29	2 24	13 40	0 40	20 31	1 54	13 25	0 27	3 31	1 13	1 24	16 12	23 23	23 25	7 17	15 9	6 47			
T 15	9 44	23 34	1 3	1 59	1 38	5 39	1 22	22 23	2 22	13 37	0 40	20 31	1 54	13 26	0 27	3 31	1 13	1 23	16 12	23 23	23 25	7 19	15 8	6 47			
W16	10 5	23 20	0n 3	1 52	1 48	6 8	1 21	22 16	2 21	13 33	0 41	20 30	1 54	13 27	0 27	3 32	1 13	1 23	16 12	23 23	23 25	7 22	15 7	6 48			
T 17	10 27	21 53	1 11	1 42	1 56	6 37	1 20	22 10	2 20	13 30	0 41	20 30	1 54	13 29	0 26	3 32	1 13	1 22	16 12	23 23	23 25	7 24	15 6	6 48			
F 18	10 48	19 15	2 17	1 31	2 4	7 6	1 19	22 3	2 18	13 27	0 41	20 30	1 54	13 30	0 26	3 33	1 13	1 22	16 12	23 23	23 25	7 27	15 6	6 49			
S 19	11 8	15 31	3 17	1 18	2 12	7 35	1 18	21 56	2 17	13 24	0 41	20 29	1 54	13 31	0 26	3 33	1 13	1 21	16 11	23 23	23 25	7 30	15 5	6 50			
S 20	11 29	10 51	4 7	1 2	2 19	8 3	1 16	21 49	2 15	13 20	0 41	20 29	1 54	13 32	0 26	3 34	1 13	1 21	16 11	23 23	23 24	7 32	15 4	6 50			
M21	11 50	5 28	4 44	0 45	2 25	8 31	1 15	21 42	2 14	13 17	0 41	20 29	1 55	13 33	0 26	3 34	1 13	1 20	16 11	23 22	23 24	7 35	15 4	6 51			
T 22	12 10	0n21	5 4	0 27	2 30	8 59	1 14	21 35	2 13	13 14	0 42	20 28	1 55	13 34	0 26	3 35	1 13	1 20	16 11	23 22	23 24	7 37	15 3	6 51			
W23	12 30	6 16	5 3	0 6	2 35	9 27	1 13	21 28	2 11	13 11	0 42	20 28	1 55	13 35	0 26	3 35	1 13	1 19	16 11	23 22	23 24	7 40	15 2	6 52			
T 24	12 50	11 52	4 41	0n16	2 39	9 55	1 11	21 21	2 10	13 8	0 42	20 27	1 55	13 36	0 26	3 36	1 13	1 19	16 11	23 22	23 24	7 42	15 2	6 53			
F 25	13 10	16 45	4 0	0 39	2 43	10 22	1 10	21 14	2 9	13 5	0 42	20 27	1 55	13 38	0 26	3 36	1 13	1 18	16 11	23 22	23 24	7 45	15 1	6 53			
S 26	13 29	20 30	3 2	1 4	2 46	10 50	1 8	21 6	2 8	13 2	0 43	20 26	1 55	13 39	0 26	3 37	1 13	1 18	16 11	23 21	23 24	7 47	15 0	6 54			
S 27	13 48	22 48	1 53	1 30	2 48	11 16	1 7	20 59	2 6	12 59	0 43	20 26	1 55	13 40	0 26	3 37	1 13	1 18	16 11	23 21	23 24	7 50	15 0	6 54			
M28	14 7	23 34	0 39	1 58	2 50	11 43	1 5	20 51	2 5	12 56	0 43	20 25	1 55	13 41	0 26	3 38	1 13	1 17	16 11	23 21	23 24	7 52	14 59	6 55			
T 29	14 26	22 49	0s35	2 27	2 51	12 9	1 4	20 43	2 4	12 53	0 43	20 25	1 55	13 42	0 26	3 38	1 12	1 17	16 11	23 21	23 24	7 55	14 58	6 56			
W30	14n45	20n47	1s45	2n57	2s51	12n36	1s 2	20n35	2n 3	12s51	0s43	20s25	1n55	13n43	0s26	3n38	1n12	1s16	16s11	23s21	23s24	7s57	14s58	6n56			

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

MAY 2104

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	14 36 12	10♈46'47	28♌23	15♊33	7♋24	7♌4	28♍8	12°R41	7♏57	23°R37	7♐44	25♑38	27♒13	8♓29	20°R44	T 1
F 2	14 40 9	11°45'04	10♌56	16°56	8°38	7°31	28°16	12♎38	8°1	23♏36	7°46	25°R39	27°10	8°35	20♐44	F 2
S 3	14 44 5	12°43'19	23°12	18°22	9°52	7°58	28°24	12°34	8°4	23°35	7°47	25°38	27°7	8°42	20°44	S 3
S 4	14 48 2	13°41'32	5♎16	19°50	11°6	8°25	28°32	12°31	8°8	23°34	7°48	25°36	27°4	8°49	20°43	S 4
M 5	14 51 58	14°39'43	17°12	21°20	12°20	8°53	28°40	12°27	8°11	23°33	7°50	25°32	27°1	8°56	20°42	M 5
T 6	14 55 55	15°37'52	29°4	22°52	13°34	9°21	28°48	12°23	8°15	23°32	7°51	25°26	26°57	9°2	20°42	T 6
W 7	14 59 51	16°36'00	10♌56	24°26	14°48	9°49	28°56	12°20	8°18	23°31	7°52	25°20	26°54	9°9	20°41	W 7
T 8	15 3 48	17°34'05	22°50	26°1	16°2	10°17	29°4	12°16	8°22	23°30	7°54	25°12	26°51	9°16	20°40	T 8
F 9	15 7 44	18°32'09	4♎49	27°39	17°16	10°45	29°11	12°12	8°25	23°29	7°55	25°6	26°48	9°22	20°39	F 9
S 10	15 11 41	19°30'11	16°54	29°19	18°30	11°13	29°18	12°8	8°28	23°28	7°57	25°0	26°45	9°29	20°39	S 10
S 11	15 15 38	20°28'11	29°7	1♉0	19°44	11°42	29°25	12°4	8°32	23°28	7°58	24°56	26°42	9°36	20°38	S 11
M12	15 19 34	21°26'10	11♎29	2°44	20°58	12°11	29°32	12°0	8°35	23°27	7°59	24°53	26°38	9°43	20°36	M12
T 13	15 23 31	22°24'07	24°2	4°29	22°12	12°40	29°39	11°56	8°39	23°26	8°1	24°D53	26°35	9°49	20°35	T 13
W14	15 27 27	23°22'03	6♌46	6°17	23°26	13°9	29°46	11°52	8°42	23°26	8°2	24°53	26°32	9°56	20°34	W14
T 15	15 31 24	24°19'58	19°45	8°6	24°40	13°38	29°53	11°48	8°45	23°25	8°3	24°55	26°29	10°3	20°33	T 15
F 16	15 35 20	25°17'51	2♎58	9°58	25°54	14°8	29°59	11°44	8°49	23°24	8°5	24°56	26°26	10°9	20°31	F 16
S 17	15 39 17	26°15'43	16°29	11°51	27°7	14°37	0♈5	11°40	8°52	23°24	8°6	24°57	26°22	10°16	20°30	S 17
S 18	15 43 14	27°13'34	0♈19	13°46	28°21	15°7	0°11	11°35	8°55	23°23	8°7	24°R58	26°19	10°23	20°28	S 18
M19	15 47 10	28°11'23	14°27	15°43	29°35	15°37	0°17	11°31	8°59	23°23	8°8	24°57	26°16	10°30	20°27	M19
T 20	15 51 7	29°9'12	28°52	17°42	0♈49	16°7	0°23	11°27	9°2	23°22	8°10	24°55	26°13	10°36	20°25	T 20
W21	15 55 3	0♈11	6°59	13°Y30	19°43	2°3	16°37	0°29	11°22	9°5	23°22	8°11	24°52	26°10	10°43	W21
T 22	15 59 0	1°4'45	28°17	21°46	3°17	17°7	0°34	11°18	9°8	23°21	8°12	24°49	26°7	10°50	20°21	T 22
F 23	16 2 56	2°2'31	13♉5	23°50	4°31	17°38	0°39	11°14	9°12	23°21	8°14	24°46	26°3	10°56	20°19	F 23
S 24	16 6 53	3°0'15	27°47	25°56	5°44	18°8	0°44	11°9	9°15	23°21	8°15	24°43	26°0	11°3	20°17	S 24
S 25	16 10 49	3°57'57	12♈15	28°4	6°58	18°39	0°49	11°5	9°18	23°20	8°16	24°42	25°57	11°10	20°15	S 25
M26	16 14 46	4°55'39	26°24	0♈12	8°12	19°10	0°54	11°1	9°21	23°20	8°17	24°D41	25°54	11°17	20°13	M26
T 27	16 18 43	5°53'19	10♌10	2°22	9°26	19°41	0°59	10°56	9°25	23°20	8°19	24°42	25°51	11°23	20°11	T 27
W28	16 22 39	6°50'57	23°32	4°33	10°40	20°12	1°3	10°52	9°28	23°20	8°20	24°43	25°48	11°30	20°9	W28
T 29	16 26 36	7°48'35	6♌30	6°44	11°53	20°43	1°7	10°47	9°31	23°19	8°21	24°44	25°44	11°37	20°6	T 29
F 30	16 30 32	8°46'10	19°7	8°56	13°7	21°14	1°11	10°43	9°34	23°19	8°22	24°46	25°41	11°44	20°4	F 30
S 31	16 34 29	9♈43'45	1♎27	11♈8	14♈21	21♌46	1♈15	10♎38	9♏37	23♏19	8♐24	24♑46	25♒38	11♓50	20♐2	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	decl	lat	decl	lat	decl	lat	
T 1	15n 3	17n44	2s48	3n29	2s51	13n 1	1 s 0	20n27	2n 1	12s48	0s44	20s24	1n55	13n44	0s26	3n39	1n12	1s16	16s11	23s21	23s24	8s 0	14s57	6n57										
F 2	15 21	13 57	3 40	4 1	2 51	13 27	0 59	20 19	2 0	12 45	0 44	20 24	1 55	13 45	0 26	3 39	1 12	1 15	16 11	23 21	23 24	8 2	14 57	6 57										
S 3	15 39	9 39	4 21	4 35	2 50	13 52	0 57	20 11	1 59	12 43	0 44	20 23	1 55	13 47	0 26	3 39	1 12	1 15	16 11	23 21	23 24	8 5	14 56	6 58										
S 4	15 56	5 4	4 50	5 10	2 48	14 17	0 55	20 2	1 58	12 40	0 44	20 23	1 55	13 48	0 26	3 40	1 12	1 15	16 11	23 21	23 24	8 7	14 56	6 59										
M 5	16 14	0 21	5 6	5 45	2 46	14 41	0 53	19 54	1 56	12 37	0 44	20 22	1 55	13 49	0 26	3 40	1 12	1 14	16 11	23 21	23 24	8 10	14 55	6 59										
T 6	16 31	4s21	5 9	6 22	2 43	15 5	0 51	19 46	1 55	12 35	0 45	20 22	1 55	13 50	0 26	3 40	1 12	1 14	16 11	23 21	23 23	8 12	14 55	7 0										
W 7	16 47	8 53	4 58	7 0	2 39	15 29	0 49	19 37	1 54	12 32	0 45	20 21	1 55	13 51	0 26	3 41	1 12	1 13	16 11	23 21	23 23	8 15	14 54	7 0										
T 8	17 4	13 7	4 35	7 38	2 35	15 52	0 47	19 28	1 53	12 30	0 45	20 21	1 55	13 52	0 26	3 41	1 12	1 13	16 11	23 20	23 23	8 17	14 54	7 1										
F 9	17 20	16 52	3 59	8 17	2 31	16 15	0 45	19 19	1 52	12 28	0 45	20 20	1 55	13 53	0 26	3 41	1 12	1 13	16 11	23 20	23 23	8 20	14 53	7 2										
S 10	17 36	19 56	3 12	8 57	2 26	16 38	0 43	19 10	1 51	12 25	0 46	20 20	1 56	13 54	0 26	3 42	1 12	1 12	16 11	23 20	23 23	8 22	14 53	7 2										
S 11	17 51	22 10	2 16	9 37	2 20	17 0	0 41	19 1	1 50	12 23	0 46	20 19	1 56	13 55	0 26	3 42	1 12	1 12	16 11	23 20	23 23	8 25	14 53	7 3										
M12	18 7	23 21	1 12	10 19	2 14	17 22	0 39	18 52	1 48	12 21	0 46	20 18	1 56	13 56	0 26	3 42	1 12	1 12	16 11	23 20	23 23	8 27	14 52	7 3										
T 13	18 22	23 22	0 5	11 0	2 8	17 43	0 37	18 43	1 47	12 19	0 46	20 18	1 56	13 58	0 26	3 42	1 12	1 11	16 11	23 20	23 23	8 30	14 52	7 4										
W14	18 36	22 11	1n 5	11 42	2 1	18 4	0 35	18 33	1 46	12 16	0 46	20 17	1 56	13 59	0 26	3 43	1 12	1 11	16 11	23 20	23 23	8 32	14 51	7 4										
T 15	18 51	19 48	2 12	12 25	1 53	18 24	0 33	18 24	1 45	12 14	0 47	20 17	1 56	14 0	0 26	3 43	1 12	1 11	16 12	23 20	23 23	8 34	14 51	7 5										
F 16	19 5	16 20	3 14	13 8	1 45	18 44	0 30	18 14	1 44	12 12	0 47	20 16	1 56	14 1	0 26	3 43	1 12	1 10	16 12	23 20	23 23	8 37	14 51	7 6										
S 17	19 18	11 58	4 6	13 50	1 37	19 3	0 28	18 5	1 43	12 10	0 47	20 16	1 56	14 2	0 26	3 43	1 12	1 10	16 12	23 20	23 23	8 39	14 50	7 6										
S 18	19 32	6 54	4 45	14 33	1 28	19 22	0 26	17 55	1 42	12 8	0 47	20 15	1 56	14 3	0 26	3 44	1 12	1 10	16 12	23 20	23 22	8 42	14 50	7 7										
M19	19 45	1 22	5 8	15 16	1 19	19 40	0 24	17 45	1 41	12 7	0 48	20 15	1 56	14 4	0 26	3 44	1 12	1 9	16 12	23 20	23 22	8 44	14 50	7 7										
T 20	19 57	4n20	5 13	15 59	1 10	19 58	0 21	17 35	1 40	12 5	0 48	20 14	1 56	14 5	0 26	3 44	1 12	1 9	16 12	23 20	23 22	8 47	14 49	7 8										
W21	20 10	9 53	4 57	16 42	1 0	20 15	0 19	17 25	1 39	12 3	0 48	20 13	1 56	14 6	0 26	3 44	1 12	1 9	16 12	23 20	23 22	8 49	14 49	7 8										
T 22	20 22	14 56	4 22	17 23	0 50	20 32	0 17	17 15	1 38	12 1	0 48	20 13	1 56	14 7	0 26	3 44	1 12	1 9	16 12	23 19	23 22	8 52	14 49	7 9										
F 23	20 33	19 5	3 29	18 5	0 40	20 48	0 14	17 4	1 37	12 0	0 49	20 12	1 55	14 8	0 26	3 44	1 12	1 8	16 12	23 19	23 22	8 54	14 49	7 9										
S 24	20 45	21 58	2 23	18 45	0 29	21 3	0 12	16 54	1 36	11 58	0 49	20 12	1 55	14 9	0 26	3 44	1 12	1 8	16 12	23 19	23 22	8 56	14 48	7 10										
S 25	20 56	23 22	1 8	19 25	0 19	21 18	0 10	16 43	1 34	11 57	0 49	20 11	1 55	14 10	0 26	3 45	1 12	1 8	16 13	23 19	23 22	8 59	14 48	7 10										
M26	21 6	23 13	0s 9	20 3	0 8	21 33	0 7	16 33	1 33	11 55	0 49	20 11	1 55	14 11	0 26	3 45	1 12	1 7	16 13	23 19	23 22	9 1	14 48	7 11										
T 27	21 17	21 38	1 24	20 40	0n 2	21 46	0 5	16 22	1 32	11 54	0 50	20 10	1 55	14 12	0 26	3 45	1 12	1 7	16 13	23 19	23 22	9 4	14 48	7 11										
W28	21 26	18 52	2 32	21 15	0 13	22 0	0 2	16 11	1 31	11 52	0 50	20 9	1 55	14 13	0 26	3 45	1 12	1 7	16 13	23 19	23 22	9 6	14 48	7 12										
T 29	21 36	15 14	3 31	21 48	0 23	22 12	0n 0	16 0	1 30	11 51	0 50	20 9	1 55	14 14	0 26	3 45	1 12	1 7	16 13	23 19	23 21	9 9	14 48	7 12										
F 30	21 45	11 0	4 17	22 20	0 34	22 24	0 2	15 49	1 29	11 50	0 50	20 8	1 55	14 15	0 26	3 45	1 12	1 6	16 13	23 19	23 21	9 11	14 47	7 13										
S 31	21n54	6n26	4s50	22n49	0n43	22n35	0n 5	15n38	1n28	11s49	0s51	20s 8	1n55	14n16	0s26	3n45	1n12	1s 6	16s13	23s19	23s21	9s13	14s47	7n13										





ASTRODIENST EPHEMERIS for the year 2104  
geocentric

JULY 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 42	9♂21'25	15♂24	4♂59	22♂24	8♂52	1°R44	8°R30	11♂ 0	23♂31	8♂55	24♂34	24♂ 0	15♂18	18°R23	T 1
W 2	18 40 39	10°18'38	27°17	6° 2	23°38	9°27	1♂42	8♂27	11° 2	23°32	8°55	24°35	23°56	15°25	18♂19	W 2
T 3	18 44 35	11°15'50	9♂15	7° 3	24°52	10° 1	1°39	8°23	11° 4	23°33	8°56	24°36	23°53	15°32	18°15	T 3
F 4	18 48 32	12°13'01	21°22	8° 1	26° 5	10°36	1°37	8°20	11° 6	23°33	8°57	24°38	23°50	15°39	18°11	F 4
S 5	18 52 28	13°10'13	3♂41	8°55	27°19	11°11	1°34	8°17	11° 8	23°34	8°58	24°39	23°47	15°45	18° 8	S 5
S 6	18 56 25	14° 7'24	16°16	9°46	28°32	11°46	1°31	8°14	11°10	23°35	8°58	24°40	23°44	15°52	18° 4	S 6
M 7	19 0 21	15° 4'36	29° 9	10°33	29°46	12°21	1°28	8°11	11°12	23°36	8°59	24°R40	23°40	15°59	18° 0	M 7
T 8	19 4 18	16° 1'47	12♂21	11°17	0♂59	12°56	1°25	8° 8	11°14	23°38	9° 0	24°39	23°37	16° 5	17°57	T 8
W 9	19 8 15	16°58'58	25°51	11°57	2°13	13°31	1°21	8° 5	11°16	23°39	9° 0	24°37	23°34	16°12	17°53	W 9
T 10	19 12 11	17°56'09	9♂37	12°33	3°26	14° 6	1°18	8° 2	11°18	23°40	9° 1	24°35	23°31	16°19	17°49	T 10
F 11	19 16 8	18°53'21	23°36	13° 5	4°40	14°41	1°14	7°59	11°19	23°41	9° 1	24°31	23°28	16°26	17°45	F 11
S 12	19 20 4	19°50'32	7♂45	13°33	5°53	15°17	1°10	7°56	11°21	23°42	9° 2	24°28	23°25	16°32	17°42	S 12
S 13	19 24 1	20°47'44	22° 0	13°57	7° 7	15°52	1° 6	7°53	11°23	23°43	9° 3	24°25	23°21	16°39	17°38	S 13
M14	19 27 57	21°44'57	6♂16	14°16	8°20	16°28	1° 2	7°51	11°25	23°44	9° 3	24°23	23°18	16°46	17°34	M14
T 15	19 31 54	22°42'10	20°32	14°30	9°34	17° 3	0°57	7°48	11°26	23°46	9° 4	24°D22	23°15	16°52	17°30	T 15
W16	19 35 50	23°39'24	4♂43	14°40	10°47	17°39	0°53	7°46	11°28	23°47	9° 4	24°23	23°12	16°59	17°27	W16
T 17	19 39 47	24°36'38	18°48	14°46	12° 1	18°14	0°48	7°43	11°29	23°48	9° 5	24°24	23° 9	17° 6	17°23	T 17
F 18	19 43 44	25°33'53	2♂45	14°R46	13°14	18°50	0°43	7°41	11°31	23°50	9° 5	24°25	23° 5	17°13	17°19	F 18
S 19	19 47 40	26°31'09	16°34	14°42	14°28	19°26	0°38	7°39	11°32	23°51	9° 5	24°26	23° 2	17°19	17°16	S 19
S 20	19 51 37	27°28'25	0♂13	14°33	15°41	20° 2	0°33	7°37	11°33	23°52	9° 6	24°R26	22°59	17°26	17°12	S 20
M21	19 55 33	28°25'42	13°39	14°19	16°54	20°38	0°27	7°35	11°35	23°54	9° 6	24°25	22°56	17°33	17° 8	M21
T 22	19 59 30	29°22'59	26°53	14° 0	18° 8	21°14	0°22	7°33	11°36	23°55	9° 7	24°22	22°53	17°39	17° 5	T 22
W23	20 3 26	0♂20'17	9♂23	13°37	19°21	21°50	0°16	7°31	11°37	23°57	9° 7	24°17	22°50	17°46	17° 1	W23
T 24	20 7 23	1°17'35	22°38	13° 9	20°35	22°27	0°10	7°29	11°39	23°58	9° 7	24°11	22°46	17°53	16°58	T 24
F 25	20 11 19	2°14'54	5♂ 8	12°38	21°48	23° 3	0° 4	7°28	11°40	24° 0	9° 8	24° 5	22°43	18° 0	16°54	F 25
S 26	20 15 16	3°12'13	17°25	12° 3	23° 1	23°39	29♂58	7°26	11°41	24° 1	9° 8	23°58	22°40	18° 6	16°51	S 26
S 27	20 19 13	4° 9'32	29°31	11°25	24°15	24°16	29°52	7°25	11°42	24° 3	9° 8	23°53	22°37	18°13	16°47	S 27
M28	20 23 9	5° 6'52	11♂28	10°45	25°28	24°52	29°45	7°23	11°43	24° 4	9° 8	23°48	22°34	18°20	16°44	M28
T 29	20 27 6	6° 4'13	23°20	10° 2	26°42	25°29	29°39	7°22	11°44	24° 6	9° 9	23°46	22°31	18°26	16°40	T 29
W30	20 31 2	7° 1'34	5♂12	9°19	27°55	26° 5	29°32	7°21	11°45	24° 8	9° 9	23°D45	22°27	18°33	16°37	W30
T 31	20 34 59	7♂58'55	17♂ 9	8♂35	29♂ 8	26♂42	29♂25	7♂20	11♂46	24♂ 9	9♂ 9	23♂45	22♂24	18♂40	16♂33	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	23n 6	10s36	4s56	19n33	0n33	22n43	1n10	9n10	1n 0	11s46	0s59	19s52	1n52	14n42	0s27	3n39	1n11	1s 3	16s20	23s19	23s17	10s27	14s51	7n22					
W 2	23 2	14 38	4 26	19 7	0 23	22 32	1 12	8 57	1 0	11 47	0 59	19 52	1 51	14 42	0 27	3 39	1 11	1 3	16 20	23 19	23 17	10 29	14 52	7 23					
T 3	22 57	18 7	3 45	18 41	0 12	22 21	1 13	8 43	0 59	11 49	1 0	19 52	1 51	14 43	0 27	3 39	1 11	1 4	16 21	23 19	23 17	10 31	14 52	7 23					
F 4	22 52	20 53	2 54	18 15	0s 0	22 9	1 15	8 29	0 58	11 50	1 0	19 51	1 51	14 44	0 27	3 38	1 11	1 4	16 21	23 19	23 17	10 34	14 52	7 23					
S 5	22 46	22 44	1 53	17 49	0 12	21 56	1 16	8 15	0 57	11 51	1 0	19 51	1 51	14 44	0 27	3 38	1 11	1 4	16 21	23 19	23 17	10 36	14 53	7 23					
S 6	22 41	23 29	0 46	17 24	0 24	21 43	1 18	8 1	0 56	11 52	1 0	19 51	1 51	14 45	0 27	3 37	1 11	1 4	16 22	23 19	23 17	10 38	14 53	7 23					
M 7	22 34	23 1	0n25	16 59	0 37	21 29	1 19	7 47	0 55	11 53	1 1	19 50	1 51	14 46	0 27	3 37	1 10	1 4	16 22	23 19	23 16	10 41	14 54	7 23					
T 8	22 28	21 16	1 36	16 34	0 51	21 14	1 20	7 33	0 55	11 55	1 1	19 50	1 50	14 46	0 27	3 36	1 10	1 4	16 22	23 19	23 16	10 43	14 54	7 23					
W 9	22 21	18 18	2 43	16 10	1 4	20 59	1 21	7 18	0 54	11 56	1 1	19 50	1 50	14 47	0 27	3 36	1 10	1 4	16 22	23 19	23 16	10 45	14 54	7 23					
T 10	22 13	14 16	3 42	15 47	1 18	20 43	1 23	7 4	0 53	11 58	1 1	19 49	1 50	14 47	0 27	3 36	1 10	1 4	16 23	23 19	23 16	10 47	14 55	7 23					
F 11	22 6	9 24	4 29	15 24	1 32	20 26	1 24	6 50	0 52	11 59	1 2	19 49	1 50	14 48	0 27	3 35	1 10	1 4	16 23	23 19	23 16	10 50	14 55	7 23					
S 12	21 58	4 0	5 0	15 3	1 46	20 9	1 25	6 35	0 51	12 1	1 2	19 49	1 50	14 48	0 27	3 35	1 10	1 4	16 23	23 19	23 16	10 52	14 56	7 23					
S 13	21 49	1n37	5 13	14 42	2 1	19 52	1 26	6 21	0 51	12 3	1 2	19 49	1 49	14 49	0 27	3 34	1 10	1 4	16 24	23 18	23 16	10 54	14 56	7 23					
M14	21 40	7 11	5 7	14 23	2 15	19 34	1 27	6 6	0 50	12 5	1 2	19 48	1 49	14 49	0 27	3 34	1 10	1 5	16 24	23 18	23 15	10 56	14 57	7 23					
T 15	21 31	12 21	4 41	14 5	2 30	19 15	1 27	5 52	0 49	12 6	1 3	19 48	1 49	14 50	0 27	3 33	1 10	1 5	16 24	23 18	23 15	10 59	14 57	7 23					
W16	21 21	16 50	3 59	13 48	2 44	18 56	1 28	5 37	0 48	12 8	1 3	19 48	1 49	14 50	0 27	3 33	1 10	1 5	16 24	23 18	23 15	11 1	14 58	7 23					
T 17	21 11	20 20	3 3	13 33	2 59	18 36	1 29	5 23	0 48	12 10	1 3	19 48	1 49	14 51	0 27	3 32	1 10	1 5	16 25	23 18	23 15	11 3	14 58	7 23					
F 18	21 1	22 35	1 56	13 19	3 13	18 16	1 29	5 8	0 47	12 12	1 3	19 48	1 48	14 51	0 27	3 31	1 10	1 5	16 25	23 18	23 15	11 6	14 59	7 23					
S 19	20 50	23 28	0 43	13 7	3 27	17 55	1 30	4 53	0 46	12 14	1 4	19 48	1 48	14 52	0 27	3 31	1 10	1 5	16 25	23 19	23 15	11 8	14 59	7 23					
S 20	20 39	22 54	0s31	12 57	3 40	17 34	1 31	4 38	0 45	12 16	1 4	19 47	1 48	14 52	0 27	3 30	1 10	1 5	16 26	23 19	23 14	11 10	15 0	7 23					
M21	20 28	21 1	1 43	12 49	3 53	17 12	1 31	4 23	0 44	12 18	1 4	19 47	1 48	14 52	0 27	3 30	1 10	1 6	16 26	23 18	23 14	11 12	15 0	7 23					
T 22	20 16	18 2	2 48	12 42	4 5	16 50	1 31	4 8	0 44	12 21	1 4	19 47	1 48	14 53	0 27	3 29	1 10	1 6	16 26	23 18	23 14	11 15	15 1	7 23					
W23	20 4	14 12	3 42	12 38	4 16	16 28	1 32	3 53	0 43	12 23	1 5	19 47	1 47	14 53	0 27	3 29	1 10	1 6	16 27	23 18	23 14	11 17	15 1	7 23					
T 24	19 52	9 48	4 24	12 36	4 26	16 4	1 32	3 38	0 42	12 25	1 5	19 47	1 47	14 53	0 27	3 28	1 10	1 6	16 27	23 18	23 14	11 19	15 2	7 23					
F 25	19 39	5 4	4 53	12 36	4 35	15 41	1 32	3 23	0 41	12 27	1 5	19 47	1 47	14 54	0 27	3 27	1 10	1 6	16 27	23 18	23 14	11 21	15 2	7 22					
S 26	19 26	0 15	5 8	12 38	4 43	15 17	1 32	3 8	0 41	12 30	1 5	19 47	1 47	14 54	0 27	3 27	1 10	1 7	16 28	23 17	23 13	11 23	15 3	7 22					
S 27	19 12	4s31	5 8	12 42	4 49	14 53	1 32	2 53	0 40	12 32	1 6	19 47	1 47	14 54	0 27	3 26	1 10	1 7	16 28	23 17	23 13	11 26	15 4	7 22					
M28	18 59	9 3	4 55	12 49	4 54	14 28	1 32	2 38	0 39	12 35	1 6	19 47	1 46	14 55	0 27	3 25	1 10	1 7	16 28	23 17	23 13	11 28	15 4	7 22					
T 29	18 45	13 14	4 30	12 57	4 57	14 3	1 32	2 23	0 38	12 37	1 6	19 47	1 46	14 55	0 27	3 25	1 10	1 7	16 29	23 17	23 13	11 30	15 5	7 22					
W30	18 30	16 54	3 53	13 7	4 59	13 38	1 32	2 8	0 38	12 40	1 6	19 47	1 46	14 55	0 27	3 24	1 10	1 8	16 29	23 17	23 13	11 32	15 5	7 22					
T 31	18n16	19s54	3s 5	13n18	4s58	13n12	1n32	1n52	0n37	12s42	1s 6	19s47	1n46	14n56	0s27	3n23	1n10	1s 8	16s29	23s17	23s12	11s35	15s 6	7n21					



## ASTRODIENST EPHEMERIS for the year 2104

geocentric

AUGUST 2104

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 38 55	8♂56'17	29♂15	7°R51	0♂22	27♂19	29°R19	7°R19	11♂46	24♂11	9♂ 9	23♂46	22♂21	18♂47	16°R30	F 1
S 2	20 42 52	9°53'39	11♂36	7♂ 8	1°35	27°56	29♂12	7♂18	11°47	24°13	9° 9	23°48	22°18	18°53	16°327	S 2
S 3	20 46 48	10°51'03	24°16	6°28	2°48	28°33	29° 5	7°17	11°48	24°14	9°10	23°R48	22°15	19° 0	16°24	S 3
M 4	20 50 45	11°48'26	7♂18	5°50	4° 1	29°10	28°58	7°16	11°49	24°16	9°10	23°47	22°11	19° 7	16°20	M 4
T 5	20 54 42	12°45'51	20°44	5°16	5°15	29°47	28°50	7°16	11°49	24°18	9°10	23°44	22° 8	19°13	16°17	T 5
W 6	20 58 38	13°43'16	4♂33	4°46	6°28	0♂24	28°43	7°15	11°50	24°20	9°10	23°39	22° 5	19°20	16°14	W 6
T 7	21 2 35	14°40'42	18°44	4°20	7°41	1° 1	28°36	7°15	11°50	24°21	9°10	23°33	22° 2	19°27	16°11	T 7
F 8	21 6 31	15°38'09	3♂11	4° 0	8°54	1°38	28°28	7°14	11°51	24°23	9°10	23°25	21°59	19°33	16° 8	F 8
S 9	21 10 28	16°35'37	17°47	3°46	10° 7	2°16	28°21	7°14	11°51	24°25	9°R10	23°17	21°56	19°40	16° 5	S 9
S 10	21 14 24	17°33'07	2♂26	3°38	11°21	2°53	28°13	7°14	11°52	24°27	9°10	23°10	21°52	19°47	16° 2	S 10
M 11	21 18 21	18°30'37	17° 1	3°D36	12°34	3°30	28° 6	7°D14	11°52	24°29	9°10	23° 4	21°49	19°54	15°59	M 11
T 12	21 22 17	19°28'09	1♂27	3°41	13°47	4° 8	27°58	7°14	11°52	24°31	9°10	23° 1	21°46	20° 0	15°57	T 12
W 13	21 26 14	20°25'43	15°39	3°54	15° 0	4°46	27°50	7°14	11°52	24°32	9°10	22°D59	21°43	20° 7	15°54	W 13
T 14	21 30 11	21°23'18	29°37	4°13	16°13	5°23	27°43	7°14	11°53	24°34	9°10	22°59	21°40	20°14	15°51	T 14
F 15	21 34 7	22°20'54	13♂20	4°39	17°26	6° 1	27°35	7°15	11°53	24°36	9° 9	23° 0	21°37	20°20	15°48	F 15
S 16	21 38 4	23°18'32	26°50	5°12	18°39	6°39	27°27	7°15	11°53	24°38	9° 9	23°R 0	21°33	20°27	15°46	S 16
S 17	21 42 0	24°16'11	10♂ 6	5°52	19°52	7°17	27°19	7°16	11°R53	24°40	9° 9	22°59	21°30	20°34	15°43	S 17
M 18	21 45 57	25°13'52	23°10	6°39	21° 5	7°54	27°11	7°16	11°53	24°42	9° 9	22°55	21°27	20°41	15°41	M 18
T 19	21 49 53	26°11'35	6♂ 3	7°33	22°18	8°32	27° 4	7°17	11°53	24°44	9° 9	22°49	21°24	20°47	15°38	T 19
W 20	21 53 50	27° 9'18	18°44	8°34	23°32	9°10	26°56	7°18	11°53	24°46	9° 9	22°40	21°21	20°54	15°36	W 20
T 21	21 57 46	28° 7'03	1♂15	9°41	24°45	9°49	26°48	7°19	11°52	24°48	9° 8	22°29	21°17	21° 1	15°34	T 21
F 22	22 1 43	29° 4'49	13°34	10°54	25°57	10°27	26°40	7°20	11°52	24°50	9° 8	22°17	21°14	21° 7	15°32	F 22
S 23	22 5 40	0♂ 2'37	25°44	12°12	27°10	11° 5	26°32	7°21	11°52	24°52	9° 8	22° 5	21°11	21°14	15°29	S 23
S 24	22 9 36	1° 0'25	7♂45	13°36	28°23	11°43	26°24	7°22	11°52	24°54	9° 7	21°54	21° 8	21°21	15°27	S 24
M 25	22 13 33	1°58'16	19°38	15° 6	29°36	12°22	26°16	7°23	11°51	24°57	9° 7	21°45	21° 5	21°27	15°25	M 25
T 26	22 17 29	2°56'07	1♂28	16°40	0♂49	13° 0	26° 9	7°25	11°51	24°59	9° 7	21°38	21° 2	21°34	15°23	T 26
W 27	22 21 26	3°53'59	13°18	18°18	2° 2	13°39	26° 1	7°26	11°50	25° 1	9° 6	21°34	20°58	21°41	15°21	W 27
T 28	22 25 22	4°51'53	25°13	20° 0	3°15	14°17	25°53	7°28	11°50	25° 3	9° 6	21°32	20°55	21°48	15°20	T 28
F 29	22 29 19	5°49'49	7♂16	21°45	4°28	14°56	25°46	7°29	11°49	25° 5	9° 6	21°D32	20°52	21°54	15°18	F 29
S 30	22 33 15	6°47'45	19°35	23°33	5°41	15°35	25°38	7°31	11°49	25° 7	9° 5	21°R32	20°49	22° 1	15°16	S 30
S 31	22 37 12	7♂45'43	2♂13	25♂24	6♂53	16♂13	25♂30	7♂33	11♂48	25♂ 9	9♂ 5	21♂32	20♂46	22♂ 8	15♂14	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
F 1	18n 1	22s 4	2 s 9	13n31	4s56	12n46	1n31	1n37	0n36	12s45	1 s 7	19s47	1n45	14n56	0s27	3n23	1n10	1 s 8	16s30	23s17	23s12	11s37	15s 6	7n21	
S 2	17 46	23 15	1 5	13 46	4 52	12 19	1 31	1 22	0 35	12 47	1 7	19 47	1 45	14 56	0 27	3 22	1 10	1 8	16 30	23 17	23 12	11 39	15 7	7 21	
S 3	17 30	23 16	0n 3	14 1	4 46	11 52	1 30	1 6	0 35	12 50	1 7	19 47	1 45	14 56	0 27	3 21	1 10	1 9	16 30	23 17	23 12	11 41	15 8	7 21	
M 4	17 14	22 1	1 12	14 17	4 39	11 25	1 30	0 51	0 34	12 53	1 7	19 47	1 45	14 56	0 27	3 21	1 10	1 9	16 31	23 17	23 12	11 43	15 8	7 20	
T 5	16 58	19 31	2 20	14 34	4 30	10 58	1 29	0 36	0 33	12 55	1 7	19 47	1 45	14 57	0 27	3 20	1 10	1 9	16 31	23 17	23 12	11 46	15 9	7 20	
W 6	16 42	15 51	3 21	14 51	4 20	10 30	1 29	0 20	0 32	12 58	1 7	19 48	1 44	14 57	0 27	3 19	1 10	1 9	16 31	23 16	23 11	11 48	15 9	7 20	
T 7	16 25	11 13	4 12	15 9	4 8	10 2	1 28	0 5	0 32	13 1	1 8	19 48	1 44	14 57	0 27	3 19	1 10	1 10	16 32	23 16	23 11	11 50	15 10	7 20	
F 8	16 8	5 52	4 47	15 26	3 55	9 34	1 27	0s11	0 31	13 3	1 8	19 48	1 44	14 57	0 27	3 18	1 10	1 10	16 32	23 16	23 11	11 52	15 11	7 19	
S 9	15 51	0 9	5 4	15 43	3 41	9 6	1 26	0 26	0 30	13 6	1 8	19 48	1 44	14 57	0 27	3 17	1 10	1 10	16 32	23 15	23 11	11 54	15 11	7 19	
S 10	15 34	5n35	5 2	15 59	3 26	8 37	1 25	0 42	0 29	13 9	1 8	19 48	1 43	14 57	0 27	3 16	1 10	1 11	16 32	23 15	23 11	11 56	15 12	7 19	
M11	15 16	10 59	4 40	16 15	3 10	8 8	1 24	0 57	0 29	13 12	1 8	19 49	1 43	14 57	0 27	3 16	1 10	1 11	16 33	23 15	23 10	11 59	15 13	7 18	
T 12	14 58	15 43	4 0	16 30	2 54	7 39	1 23	1 13	0 28	13 15	1 8	19 49	1 43	14 57	0 27	3 15	1 10	1 11	16 33	23 14	23 10	12 1	15 13	7 18	
W13	14 40	19 29	3 6	16 43	2 37	7 10	1 22	1 28	0 27	13 17	1 9	19 49	1 43	14 57	0 27	3 14	1 10	1 12	16 33	23 14	23 10	12 3	15 14	7 18	
T 14	14 22	22 2	2 2	16 55	2 21	6 40	1 20	1 44	0 27	13 20	1 9	19 49	1 42	14 57	0 27	3 13	1 10	1 12	16 34	23 14	23 10	12 5	15 15	7 17	
F 15	14 3	23 14	0 51	17 5	2 4	6 10	1 19	2 0	0 26	13 23	1 9	19 50	1 42	14 57	0 27	3 12	1 10	1 12	16 34	23 14	23 10	12 7	15 15	7 17	
S 16	13 44	23 3	0s20	17 14	1 46	5 41	1 18	2 15	0 25	13 26	1 9	19 50	1 42	14 58	0 27	3 12	1 10	1 13	16 34	23 14	23 9	12 9	15 16	7 17	
S 17	13 25	21 33	1 30	17 21	1 30	5 11	1 16	2 31	0 24	13 29	1 9	19 50	1 42	14 57	0 27	3 11	1 10	1 13	16 35	23 14	23 9	12 12	15 16	7 16	
M18	13 6	18 55	2 34	17 25	1 13	4 40	1 15	2 46	0 24	13 31	1 9	19 50	1 42	14 57	0 27	3 10	1 10	1 13	16 35	23 14	23 9	12 14	15 17	7 16	
T 19	12 47	15 23	3 28	17 28	0 57	4 10	1 13	3 2	0 23	13 34	1 9	19 51	1 41	14 57	0 27	3 9	1 10	1 14	16 35	23 14	23 9	12 16	15 18	7 16	
W20	12 27	11 13	4 11	17 27	0 41	3 40	1 11	3 18	0 22	13 37	1 9	19 51	1 41	14 57	0 27	3 8	1 10	1 14	16 36	23 13	23 9	12 18	15 18	7 15	
T 21	12 7	6 38	4 42	17 25	0 25	3 9	1 10	3 33	0 22	13 40	1 9	19 52	1 41	14 57	0 27	3 8	1 10	1 14	16 36	23 13	23 8	12 20	15 19	7 15	
F 22	11 47	1 51	4 59	17 19	0 10	2 39	1 8	3 49	0 21	13 43	1 10	19 52	1 41	14 57	0 27	3 7	1 10	1 15	16 36	23 12	23 8	12 22	15 20	7 14	
S 23	11 27	2s55	5 1	17 11	0n 4	2 8	1 6	4 4	0 20	13 45	1 10	19 52	1 40	14 57	0 27	3 6	1 10	1 15	16 37	23 11	23 8	12 24	15 20	7 14	
S 24	11 7	7 31	4 51	17 0	0 17	1 37	1 4	4 20	0 19	13 48	1 10	19 53	1 40	14 57	0 27	3 5	1 10	1 16	16 37	23 11	23 8	12 27	15 21	7 14	
M25	10 46	11 48	4 28	16 46	0 29	1 6	1 2	4 36	0 19	13 51	1 10	19 53	1 40	14 57	0 27	3 4	1 10	1 16	16 37	23 10	23 8	12 29	15 22	7 13	
T 26	10 25	15 37	3 53	16 29	0 41	0 36	1 0	4 51	0 18	13 54	1 10	19 54	1 40	14 57	0 27	3 4	1 10	1 16	16 37	23 10	23 7	12 31	15 22	7 13	
W27	10 4	18 49	3 8	16 9	0 52	0 5	0 58	5 7	0 17	13 56	1 10	19 54	1 40	14 57	0 27	3 3	1 10	1 17	16 38	23 9	23 7	12 33	15 23	7 12	
T 28	9 43	21 14	2 15	15 47	1 1	0s26	0 56	5 22	0 17	13 59	1 10	19 55	1 39	14 56	0 27	3 2	1 10	1 17	16 38	23 9	23 7	12 35	15 24	7 12	
F 29	9 22	22 45	1 15	15 21	1 10	0 57	0 54	5 38	0 16	14 2	1 10	19 55	1 39	14 56	0 27	3 1	1 10	1 18	16 38	23 9	23 7	12 37	15 24	7 11	
S 30	9 1	23 11	0 10	14 53	1 18	1 28	0 51	5 54	0 15	14 4	1 10	19 56	1 39	14 56	0 27	3 0	1 10	1 18	16 39	23 9	23 6	12 39	15 25	7 11	
S 31	8n39	22s28	0n56	14n23	1n25	1s59	0n49	6s 9	0n15	14s 7	1s10	19s56	1n39	14n56	0s27	2n59	1n10	1s18	16s39	23s 9	23s 6	12s41	15s25	7n11	

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

SEPTEMBER 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 41 8	8♎43'42	15♊16	27♏16	8♎ 6	16♊52	25°R23	7♎35	11°R47	25♎11	9°R 4	21°R30	20♎43	22♊14	15°R13	M 1
T 2	22 45 5	9°41'42	28°47	29°10	9°19	17°31	25°R16	7°37	11♎47	25°13	9♎ 4	21♎26	20°39	22°21	15♊11	T 2
W 3	22 49 2	10°39'44	12♎46	1♎ 6	10°32	18°10	25° 8	7°39	11°46	25°16	9° 3	21°19	20°36	22°28	15°10	W 3
T 4	22 52 58	11°37'47	27°11	3° 2	11°44	18°49	25° 1	7°42	11°45	25°18	9° 3	21°10	20°33	22°34	15° 9	T 4
F 5	22 56 55	12°35'52	11♎58	4°58	12°57	19°28	24°54	7°44	11°44	25°20	9° 2	20°59	20°30	22°41	15° 8	F 5
S 6	23 0 51	13°33'59	26°58	6°55	14°10	20° 7	24°47	7°46	11°43	25°22	9° 2	20°48	20°27	22°48	15° 6	S 6
S 7	23 4 48	14°32'07	12♎1	8°52	15°22	20°46	24°40	7°49	11°42	25°24	9° 1	20°38	20°23	22°55	15° 5	S 7
M 8	23 8 44	15°30'17	26°58	10°49	16°35	21°26	24°33	7°51	11°41	25°27	9° 0	20°30	20°20	23° 1	15° 4	M 8
T 9	23 12 41	16°28'29	11♎41	12°45	17°47	22° 5	24°26	7°54	11°40	25°29	9° 0	20°24	20°17	23° 8	15° 3	T 9
W10	23 16 37	17°26'43	26° 5	14°40	19° 0	22°44	24°20	7°57	11°39	25°31	8°59	20°21	20°14	23°15	15° 2	W10
T 11	23 20 34	18°24'59	10♎7	16°35	20°12	23°24	24°13	8° 0	11°38	25°33	8°59	20°20	20°11	23°21	15° 2	T 11
F 12	23 24 31	19°23'18	23°47	18°29	21°25	24° 3	24° 7	8° 3	11°37	25°35	8°58	20°20	20° 8	23°28	15° 1	F 12
S 13	23 28 27	20°21'38	7♎ 7	20°23	22°37	24°43	24° 0	8° 6	11°35	25°38	8°57	20°20	20° 4	23°35	15° 0	S 13
S 14	23 32 24	21°20'01	20°10	22°15	23°50	25°23	23°54	8° 9	11°34	25°40	8°57	20°18	20° 1	23°41	15° 0	S 14
M15	23 36 20	22°18'25	2♎58	24° 6	25° 2	26° 2	23°48	8°12	11°33	25°42	8°56	20°13	19°58	23°48	14°59	M15
T 16	23 40 17	23°16'52	15°34	25°57	26°14	26°42	23°42	8°15	11°31	25°44	8°55	20° 6	19°55	23°55	14°59	T 16
W17	23 44 13	24°15'21	27°59	27°46	27°27	27°22	23°36	8°19	11°30	25°47	8°54	19°55	19°52	24° 2	14°59	W17
T 18	23 48 10	25°13'51	10♎16	29°34	28°39	28° 2	23°31	8°22	11°29	25°49	8°54	19°43	19°48	24° 8	14°58	T 18
F 19	23 52 6	26°12'24	22°24	1♎21	29°51	28°42	23°25	8°26	11°27	25°51	8°53	19°29	19°45	24°15	14°58	F 19
S 20	23 56 3	27°10'58	4♎25	3° 8	1♎ 4	29°22	23°20	8°29	11°25	25°53	8°52	19°15	19°42	24°22	14°D58	S 20
S 21	0 0 0	28° 9'34	16°20	4°53	2°16	0♎ 2	23°15	8°33	11°24	25°55	8°51	19° 2	19°39	24°28	14°58	S 21
M22	0 3 56	29° 8'13	28°11	6°37	3°28	0°42	23°10	8°37	11°22	25°58	8°50	18°51	19°36	24°35	14°58	M22
T 23	0 7 53	0♎ 6'53	9♎59	8°20	4°40	1°23	23° 5	8°41	11°21	26° 0	8°50	18°42	19°33	24°42	14°58	T 23
W24	0 11 49	1° 5'34	21°48	10° 2	5°52	2° 3	23° 0	8°45	11°19	26° 2	8°49	18°37	19°29	24°48	14°59	W24
T 25	0 15 46	2° 4'18	3♎42	11°43	7° 5	2°43	22°56	8°49	11°17	26° 4	8°48	18°34	19°26	24°55	14°59	T 25
F 26	0 19 42	3° 3'03	15°44	13°23	8°17	3°24	22°51	8°53	11°15	26° 7	8°47	18°D33	19°23	25° 2	14°59	F 26
S 27	0 23 39	4° 1'50	27°59	15° 2	9°29	4° 4	22°47	8°57	11°14	26° 9	8°46	18°R33	19°20	25° 9	15° 0	S 27
S 28	0 27 35	5° 0'39	10♊34	16°40	10°41	4°45	22°43	9° 1	11°12	26°11	8°45	18°33	19°17	25°15	15° 1	S 28
M29	0 31 32	5°59'30	23°32	18°18	11°53	5°25	22°39	9° 6	11°10	26°13	8°44	18°32	19°14	25°22	15° 1	M29
T 30	0 35 29	6♎58'22	6♎58	19♎54	13♎ 5	6♎ 6	22°R36	9♎10	11♎ 8	26♎15	8♎43	18♎29	19♎10	25♎29	15♊ 2	T 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
M 1	8n18	20s32	2n 2	13n50	1n31	2s30	0n47	6s25	0n14	14s 9	1s10	19s57	1n38	14n56	0s27	2n58	1n10	1s19	16s39	23s 9	23s 6	12s43	15s26	7n10			
T 2	7 56	17 24	3 3	13 15	1 36	3 1	0 44	6 40	0 13	14 12	1 10	19 57	1 38	14 55	0 27	2 58	1 10	1 19	16 40	23 9	23 6	12 45	15 27	7 10			
W 3	7 34	13 12	3 56	12 38	1 40	3 32	0 42	6 56	0 13	14 14	1 10	19 58	1 38	14 55	0 28	2 57	1 10	1 20	16 40	23 8	23 6	12 48	15 27	7 9			
T 4	7 12	8 8	4 35	11 59	1 43	4 2	0 39	7 11	0 12	14 17	1 10	19 58	1 38	14 55	0 28	2 56	1 10	1 20	16 40	23 8	23 5	12 50	15 28	7 9			
F 5	6 50	2 30	4 57	11 19	1 45	4 33	0 36	7 27	0 11	14 19	1 10	19 59	1 38	14 55	0 28	2 55	1 10	1 20	16 40	23 7	23 5	12 52	15 28	7 8			
S 6	6 27	3n22	4 59	10 37	1 46	5 4	0 34	7 42	0 10	14 22	1 10	20 0	1 37	14 54	0 28	2 54	1 10	1 21	16 41	23 6	23 5	12 54	15 29	7 8			
S 7	6 5	9 3	4 40	9 54	1 47	5 34	0 31	7 57	0 10	14 24	1 10	20 0	1 37	14 54	0 28	2 53	1 10	1 21	16 41	23 6	23 5	12 56	15 30	7 7			
M 8	5 43	14 9	4 2	9 10	1 47	6 5	0 28	8 13	0 9	14 26	1 10	20 1	1 37	14 54	0 28	2 52	1 10	1 22	16 41	23 5	23 4	12 58	15 30	7 7			
T 9	5 20	18 19	3 9	8 25	1 46	6 35	0 26	8 28	0 8	14 28	1 10	20 1	1 37	14 53	0 28	2 52	1 10	1 22	16 41	23 5	23 4	13 0	15 31	7 6			
W10	4 57	21 17	2 4	7 39	1 45	7 5	0 23	8 43	0 8	14 31	1 10	20 2	1 36	14 53	0 28	2 51	1 10	1 23	16 42	23 4	23 4	13 2	15 31	7 6			
T 11	4 35	22 50	0 54	6 52	1 43	7 35	0 20	8 58	0 7	14 33	1 10	20 3	1 36	14 53	0 28	2 50	1 10	1 23	16 42	23 4	23 4	13 4	15 32	7 5			
F 12	4 12	22 59	0s18	6 5	1 41	8 5	0 17	9 14	0 6	14 35	1 10	20 3	1 36	14 52	0 28	2 49	1 10	1 23	16 42	23 4	23 3	13 6	15 33	7 5			
S 13	3 49	21 47	1 28	5 18	1 38	8 35	0 14	9 29	0 6	14 37	1 10	20 4	1 36	14 52	0 28	2 48	1 10	1 24	16 42	23 4	23 3	13 8	15 33	7 4			
S 14	3 26	19 26	2 31	4 31	1 34	9 4	0 11	9 44	0 5	14 39	1 10	20 5	1 36	14 51	0 28	2 47	1 10	1 24	16 43	23 4	23 3	13 10	15 34	7 4			
M15	3 3	16 10	3 25	3 43	1 30	9 34	0 8	9 59	0 4	14 41	1 10	20 6	1 35	14 51	0 28	2 46	1 10	1 25	16 43	23 4	23 3	13 12	15 34	7 3			
T 16	2 40	12 13	4 8	2 55	1 26	10 3	0 5	10 14	0 4	14 43	1 10	20 6	1 35	14 51	0 28	2 45	1 10	1 25	16 43	23 3	23 3	13 14	15 35	7 3			
W17	2 17	7 48	4 38	2 8	1 21	10 32	0 2	10 29	0 3	14 45	1 10	20 7	1 35	14 50	0 28	2 45	1 10	1 26	16 43	23 3	23 2	13 16	15 35	7 2			
T 18	1 54	3 9	4 56	1 20	1 16	11 1	0s 1	10 44	0 2	14 47	1 10	20 8	1 35	14 50	0 28	2 44	1 10	1 26	16 44	23 2	23 2	13 18	15 36	7 2			
F 19	1 30	1s34	4 59	0 33	1 11	11 29	0 5	10 59	0 2	14 48	1 10	20 8	1 35	14 49	0 28	2 43	1 10	1 27	16 44	23 1	23 2	13 20	15 37	7 1			
S 20	1 7	6 11	4 50	0s15	1 5	11 57	0 8	11 13	0 1	14 50	1 10	20 9	1 34	14 49	0 28	2 42	1 10	1 27	16 44	22 59	23 2	13 22	15 37	7 1			
S 21	0 44	10 32	4 27	1 2	1 0	12 25	0 11	11 28	0 1	14 52	1 10	20 10	1 34	14 48	0 28	2 41	1 10	1 27	16 44	22 58	23 1	13 24	15 38	7 0			
M22	0 21	14 27	3 53	1 48	0 53	12 53	0 14	11 43	0s 0	14 53	1 10	20 11	1 34	14 48	0 28	2 40	1 10	1 28	16 44	22 57	23 1	13 26	15 38	6 59			
T 23	0s 3	17 47	3 9	2 35	0 47	13 21	0 17	11 57	0 1	14 55	1 10	20 12	1 34	14 47	0 28	2 39	1 10	1 28	16 45	22 57	23 1	13 29	15 39	6 59			
W24	0 26	20 24	2 17	3 21	0 41	13 48	0 21	12 12	0 1	14 56	1 10	20 12	1 34	14 47	0 28	2 38	1 10	1 29	16 45	22 56	23 1	13 31	15 39	6 58			
T 25	0 49	22 9	1 18	4 6	0 34	14 15	0 24	12 27	0 2	14 58	1 10	20 13	1 33	14 46	0 28	2 38	1 10	1 29	16 45	22 56	23 0	13 33	15 40	6 58			
F 26	1 13	22 55	0 15	4 51	0 28	14 41	0 27	12 41	0 3	14 59	1 10	20 14	1 33	14 46	0 28	2 37	1 10	1 30	16 45	22 56	23 0	13 35	15 40	6 57			
S 27	1 36	22 35	0n50	5 36	0 21	15 7	0 31	12 55	0 3	15 1	1 10	20 15	1 33	14 45	0 28	2 36	1 10	1 30	16 45	22 56	23 0	13 37	15 41	6 57			
S 28	1 59	21 7	1 54	6 20	0 14	15 33	0 34	13 10	0 4	15 2	1 10	20 16	1 33	14 44	0 28	2 35	1 10	1 30	16 46	22 56	23 0	13 39	15 41	6 56			
M29	2 23	18 31	2 54	7 4	0 7	15 59	0 37	13 24	0 5	15 3	1 9	20 17	1 33	14 44	0 28	2 34	1 10	1 31	16 46	22 56	22 59	13 40	15 42	6 56			
T 30	2s46	14s51	3n47	7s47	0s 0	16s24	0s41	13s38	0s 5	15s 4	1 s 9	20s17	1n32	14n43	0s28	2n33	1n10	1s31	16s46	22s56	22s59	13s42	15s42	6n55			

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

OCTOBER 2104

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 39 25	7♂57'16	20♂54	21♂30	14♂16	6♂47	22°R32	9♂15	11°R 6	26♂18	8°R42	18°R23	19♂ 7	25♂35	15♂ 3	W 1
T 2	0 43 22	8°56'11	5♂20	23° 4	15°28	7°28	22♂29	9°19	11♂ 4	26°20	8♂41	18♂15	19° 4	25°42	15° 4	T 2
F 3	0 47 18	9°55'09	20°12	24°38	16°40	8° 8	22°26	9°24	11° 2	26°22	8°41	18° 5	19° 1	25°49	15° 5	F 3
S 4	0 51 15	10°54'08	5♂21	26°11	17°52	8°49	22°23	9°29	11° 0	26°24	8°40	17°55	18°58	25°55	15° 6	S 4
S 5	0 55 11	11°53'09	20°39	27°43	19° 4	9°30	22°20	9°33	10°58	26°26	8°39	17°46	18°54	26° 2	15° 7	S 5
M 6	0 59 8	12°52'13	5♂53	29°14	20°15	10°11	22°18	9°38	10°56	26°28	8°38	17°38	18°51	26° 9	15° 8	M 6
T 7	1 3 4	13°51'18	20°54	0♂45	21°27	10°52	22°16	9°43	10°54	26°31	8°37	17°33	18°48	26°15	15° 9	T 7
W 8	1 7 1	14°50'26	5♂34	2°14	22°38	11°34	22°14	9°48	10°52	26°33	8°36	17°30	18°45	26°22	15°11	W 8
T 9	1 10 57	15°49'37	19°48	3°43	23°50	12°15	22°12	9°53	10°50	26°35	8°35	17°D30	18°42	26°29	15°12	T 9
F 10	1 14 54	16°48'49	3♂35	5°11	25° 1	12°56	22°10	9°58	10°48	26°37	8°33	17°31	18°39	26°36	15°14	F 10
S 11	1 18 51	17°48'04	16°58	6°38	26°13	13°38	22° 8	10° 3	10°45	26°39	8°32	17°R31	18°35	26°42	15°15	S 11
S 12	1 22 47	18°47'21	29°58	8° 4	27°24	14°19	22° 7	10° 9	10°43	26°41	8°31	17°30	18°32	26°49	15°17	S 12
M13	1 26 44	19°46'41	12♂39	9°29	28°36	15° 1	22° 6	10°14	10°41	26°43	8°30	17°28	18°29	26°56	15°19	M13
T 14	1 30 40	20°46'02	25° 6	10°54	29°47	15°42	22° 5	10°19	10°39	26°45	8°29	17°23	18°26	27° 2	15°21	T 14
W15	1 34 37	21°45'26	7♂20	12°17	0♂58	16°24	22° 4	10°25	10°36	26°47	8°28	17°15	18°23	27° 9	15°23	W15
T 16	1 38 33	22°44'52	19°26	13°40	2° 9	17° 5	22° 4	10°30	10°34	26°49	8°27	17° 6	18°20	27°16	15°25	T 16
F 17	1 42 30	23°44'21	1♂24	15° 1	3°21	17°47	22° 3	10°36	10°32	26°52	8°26	16°56	18°16	27°22	15°27	F 17
S 18	1 46 26	24°43'51	13°19	16°22	4°32	18°29	22°D 3	10°41	10°29	26°54	8°25	16°45	18°13	27°29	15°29	S 18
S 19	1 50 23	25°43'24	25°10	17°41	5°43	19°11	22° 3	10°47	10°27	26°56	8°24	16°35	18°10	27°36	15°31	S 19
M20	1 54 20	26°42'58	7♂ 0	18°59	6°54	19°53	22° 4	10°53	10°25	26°58	8°23	16°27	18° 7	27°42	15°33	M20
T 21	1 58 16	27°42'35	18°49	20°16	8° 5	20°35	22° 4	10°58	10°22	27° 0	8°22	16°21	18° 4	27°49	15°36	T 21
W22	2 2 13	28°42'13	0♂42	21°32	9°16	21°17	22° 5	11° 4	10°20	27° 2	8°21	16°18	18° 0	27°56	15°38	W22
T 23	2 6 9	29°41'54	12°39	22°46	10°27	21°59	22° 6	11°10	10°17	27° 3	8°19	16°D16	17°57	28° 3	15°41	T 23
F 24	2 10 6	0♂41'36	24°44	23°59	11°37	22°41	22° 7	11°16	10°15	27° 5	8°18	16°16	17°54	28° 9	15°43	F 24
S 25	2 14 2	1°41'20	7♂ 2	25° 9	12°48	23°24	22° 8	11°22	10°13	27° 7	8°17	16°18	17°51	28°16	15°46	S 25
S 26	2 17 59	2°41'06	19°35	26°18	13°59	24° 6	22° 9	11°28	10°10	27° 9	8°16	16°19	17°48	28°23	15°49	S 26
M27	2 21 55	3°40'53	2♂30	27°25	15° 9	24°48	22°11	11°34	10° 8	27°11	8°15	16°R20	17°45	28°29	15°51	M27
T 28	2 25 52	4°40'42	15°49	28°30	16°20	25°31	22°13	11°40	10° 5	27°13	8°14	16°19	17°41	28°36	15°54	T 28
W29	2 29 49	5°40'33	29°35	29°32	17°30	26°13	22°15	11°46	10° 3	27°15	8°13	16°17	17°38	28°43	15°57	W29
T 30	2 33 45	6°40'25	13♂49	0♂31	18°41	26°56	22°17	11°53	10° 0	27°17	8°12	16°13	17°35	28°49	16° 0	T 30
F 31	2 37 42	7♂40'19	28♂30	1♂28	19♂51	27♂38	22♂20	11♂59	9♂58	27♂18	8♂10	16♂ 8	17♂32	28♂56	16♂ 3	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	3s 9	10s16	4n29	8s29	0s 7	16s49	0s44	13s52	0s 6	15s 5	1 s 9	20s18	1n32	14n43	0s28	2n32	1n10	1s32	16s46	22s55	22s59	13s44	15s42	6n55					
T 2	3 32	4 58	4 55	9 11	0 15	17 13	0 47	14 6	0 7	15 6	1 9	20 19	1 32	14 42	0 28	2 32	1 10	1 32	16 46	22 54	22 59	13 46	15 43	6 54					
F 3	3 56	0n45	5 2	9 52	0 22	17 37	0 51	14 20	0 7	15 7	1 9	20 20	1 32	14 41	0 28	2 31	1 10	1 33	16 46	22 53	22 58	13 48	15 43	6 54					
S 4	4 19	6 33	4 49	10 33	0 29	18 1	0 54	14 33	0 8	15 8	1 9	20 21	1 32	14 41	0 28	2 30	1 10	1 33	16 47	22 53	22 58	13 50	15 44	6 53					
S 5	4 42	11 59	4 15	11 13	0 36	18 24	0 57	14 47	0 8	15 9	1 9	20 22	1 32	14 40	0 28	2 29	1 10	1 34	16 47	22 52	22 58	13 52	15 44	6 53					
M 6	5 5	16 40	3 23	11 52	0 43	18 46	1 1	15 1	0 9	15 9	1 9	20 23	1 31	14 39	0 28	2 28	1 10	1 34	16 47	22 51	22 57	13 54	15 45	6 52					
T 7	5 28	20 10	2 17	12 31	0 51	19 9	1 4	15 14	0 10	15 10	1 9	20 24	1 31	14 39	0 28	2 27	1 10	1 34	16 47	22 51	22 57	13 56	15 45	6 51					
W 8	5 51	22 15	1 3	13 9	0 58	19 30	1 7	15 27	0 10	15 11	1 9	20 24	1 31	14 38	0 28	2 26	1 10	1 35	16 47	22 50	22 57	13 58	15 45	6 51					
T 9	6 13	22 50	0s12	13 46	1 5	19 52	1 11	15 41	0 11	15 11	1 8	20 25	1 31	14 37	0 28	2 26	1 10	1 35	16 47	22 50	22 57	14 0	15 46	6 50					
F 10	6 36	21 58	1 25	14 22	1 12	20 12	1 14	15 54	0 12	15 12	1 8	20 26	1 31	14 37	0 28	2 25	1 10	1 36	16 47	22 50	22 56	14 2	15 46	6 50					
S 11	6 59	19 51	2 31	14 58	1 19	20 33	1 17	16 7	0 12	15 12	1 8	20 27	1 30	14 36	0 28	2 24	1 10	1 36	16 47	22 50	22 56	14 4	15 46	6 49					
S 12	7 21	16 47	3 27	15 32	1 26	20 52	1 20	16 20	0 13	15 12	1 8	20 28	1 30	14 35	0 28	2 23	1 10	1 36	16 48	22 50	22 56	14 6	15 47	6 49					
M13	7 44	12 59	4 11	16 6	1 32	21 12	1 24	16 33	0 13	15 12	1 8	20 29	1 30	14 35	0 28	2 22	1 10	1 37	16 48	22 50	22 56	14 8	15 47	6 48					
T 14	8 6	8 42	4 43	16 39	1 39	21 30	1 27	16 45	0 14	15 13	1 8	20 30	1 30	14 34	0 28	2 22	1 10	1 37	16 48	22 50	22 55	14 10	15 47	6 48					
W15	8 28	4 9	5 1	17 11	1 45	21 48	1 30	16 58	0 15	15 13	1 8	20 31	1 30	14 33	0 28	2 21	1 10	1 38	16 48	22 49	22 55	14 12	15 48	6 47					
T 16	8 51	0s30	5 5	17 42	1 52	22 6	1 33	17 10	0 15	15 13	1 8	20 32	1 30	14 33	0 28	2 20	1 10	1 38	16 48	22 48	22 55	14 14	15 48	6 47					
F 17	9 13	5 5	4 56	18 13	1 58	22 23	1 36	17 23	0 16	15 13	1 8	20 33	1 29	14 32	0 28	2 19	1 10	1 38	16 48	22 47	22 54	14 16	15 48	6 46					
S 18	9 34	9 27	4 34	18 42	2 4	22 39	1 39	17 35	0 16	15 13	1 7	20 34	1 29	14 31	0 28	2 18	1 10	1 39	16 48	22 46	22 54	14 17	15 49	6 46					
S 19	9 56	13 27	4 0	19 10	2 10	22 55	1 42	17 47	0 17	15 13	1 7	20 35	1 29	14 30	0 28	2 18	1 10	1 39	16 48	22 45	22 54	14 19	15 49	6 45					
M20	10 18	16 55	3 15	19 38	2 15	23 11	1 45	17 59	0 18	15 12	1 7	20 36	1 29	14 30	0 28	2 17	1 10	1 40	16 48	22 44	22 54	14 21	15 49	6 45					
T 21	10 39	19 42	2 23	20 4	2 21	23 25	1 48	18 11	0 18	15 12	1 7	20 37	1 29	14 29	0 28	2 16	1 10	1 40	16 48	22 44	22 53	14 23	15 49	6 44					
W22	11 0	21 38	1 23	20 29	2 26	23 39	1 51	18 22	0 19	15 12	1 7	20 37	1 29	14 28	0 28	2 15	1 10	1 40	16 48	22 43	22 53	14 25	15 49	6 44					
T 23	11 22	22 37	0 20	20 53	2 31	23 53	1 54	18 34	0 19	15 11	1 7	20 38	1 29	14 27	0 28	2 15	1 10	1 41	16 48	22 43	22 53	14 27	15 50	6 43					
F 24	11 42	22 34	0n46	21 16	2 35	24 6	1 57	18 45	0 20	15 11	1 7	20 39	1 28	14 27	0 28	2 14	1 10	1 41	16 48	22 43	22 52	14 29	15 50	6 43					
S 25	12 3	21 24	1 50	21 37	2 39	24 18	1 59	18 57	0 21	15 10	1 7	20 40	1 28	14 26	0 28	2 13	1 10	1 41	16 48	22 43	22 52	14 31	15 50	6 42					
S 26	12 24	19 11	2 51	21 57	2 43	24 29	2 2	19 8	0 21	15 10	1 6	20 41	1 28	14 25	0 28	2 12	1 10	1 42	16 48	22 43	22 52	14 33	15 50	6 42					
M27	12 44	15 57	3 45	22 16	2 46	24 40	2 5	19 19	0 22	15 9	1 6	20 42	1 28	14 24	0 28	2 12	1 10	1 42	16 48	22 43	22 52	14 34	15 50	6 41					
T 28	13 4	11 49	4 28	22 34	2 49	24 50	2 7	19 29	0 22	15 8	1 6	20 43	1 28	14 24	0 28	2 11	1 10	1 43	16 48	22 43	22 51	14 36	15 51	6 41					
W29	13 24	6 58	4 58	22 50	2 52	25 0	2 10	19 40	0 23	15 8	1 6	20 44	1 28	14 23	0 28	2 10	1 10	1 43	16 48	22 43	22 51	14 38	15 51	6 40					
T 30	13 44	1 35	5 10	23 5	2 54	25 8	2 12	19 51	0 24	15 7	1 6	20 45	1 28	14 22	0 28	2 10	1 10	1 43	16 48	22 43	22 51	14 40	15 51	6 40					
F 31	14s 4	4n 3	5n 3	23s18	2s55	25s17	2s15	20s 1	0s24	15s 6	1 s 6	20s46	1n27	14n21	0s28	2n 9	1n10	1s44	16s48	22s42	22s50	14s42	15s51	6n39					

ASTRODIENST EPHEMERIS for the year 2104  
geocentric

NOVEMBER 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 38	8♈40'14	13♈31	2♈21	21♈1	28♈21	22♈23	12♈5	9♈R55	27♈20	8♈R 9	16♈R 2	17♈29	29♈3	16♈6	S 1
S 2	2 45 35	9°40'12	28°45	3° 9	22°11	29° 4	22°25	12°11	9♈53	27°22	8♈ 8	15♈56	17°25	29° 9	16°10	S 2
M 3	2 49 31	10°40'11	14♈1	3°54	23°21	29°47	22°28	12°18	9°50	27°24	8° 7	15°52	17°22	29°16	16°13	M 3
T 4	2 53 28	11°40'12	29° 9	4°34	24°31	0♈29	22°32	12°24	9°48	27°25	8° 6	15°49	17°19	29°23	16°16	T 4
W 5	2 57 24	12°40'15	14♈0	5° 9	25°41	1°12	22°35	12°31	9°45	27°27	8° 5	15°D48	17°16	29°30	16°20	W 5
T 6	3 1 21	13°40'21	28°27	5°38	26°51	1°55	22°39	12°37	9°43	27°29	8° 4	15°49	17°13	29°36	16°23	T 6
F 7	3 5 18	14°40'28	12♈26	6° 0	28° 1	2°38	22°43	12°44	9°41	27°30	8° 3	15°50	17°10	29°43	16°27	F 7
S 8	3 9 14	15°40'37	25°58	6°15	29°10	3°21	22°47	12°50	9°38	27°32	8° 1	15°52	17° 6	29°50	16°30	S 8
S 9	3 13 11	16°40'49	9♈4	6°R23	0♈20	4° 5	22°51	12°57	9°36	27°34	8° 0	15°53	17° 3	29°56	16°34	S 9
M10	3 17 7	17°41'02	21°48	6°22	1°29	4°48	22°55	13° 4	9°33	27°35	7°59	15°R53	17° 0	0♈3	16°38	M10
T 11	3 21 4	18°41'17	4♈13	6°12	2°38	5°31	23° 0	13°10	9°31	27°37	7°58	15°52	16°57	0°10	16°41	T 11
W12	3 25 0	19°41'35	16°23	5°52	3°48	6°14	23° 4	13°17	9°28	27°38	7°57	15°50	16°54	0°16	16°45	W12
T 13	3 28 57	20°41'54	28°24	5°22	4°57	6°58	23° 9	13°24	9°26	27°40	7°56	15°46	16°51	0°23	16°49	T 13
F 14	3 32 53	21°42'15	10♈17	4°43	6° 6	7°41	23°14	13°30	9°24	27°41	7°55	15°42	16°47	0°30	16°53	F 14
S 15	3 36 50	22°42'38	22° 8	3°53	7°15	8°25	23°20	13°37	9°21	27°43	7°54	15°38	16°44	0°36	16°57	S 15
S 16	3 40 47	23°43'03	3♈57	2°54	8°23	9° 8	23°25	13°44	9°19	27°44	7°53	15°34	16°41	0°43	17° 1	S 16
M17	3 44 43	24°43'30	15°48	1°47	9°32	9°52	23°31	13°51	9°16	27°46	7°52	15°31	16°38	0°50	17° 5	M17
T 18	3 48 40	25°43'58	27°43	0°33	10°40	10°36	23°37	13°58	9°14	27°47	7°50	15°29	16°35	0°56	17° 9	T 18
W19	3 52 36	26°44'28	9♈44	29♈14	11°49	11°20	23°43	14° 4	9°12	27°48	7°49	15°D28	16°31	1° 3	17°14	W19
T 20	3 56 33	27°44'59	21°51	27°53	12°57	12° 3	23°49	14°11	9° 9	27°50	7°48	15°28	16°28	1°10	17°18	T 20
F 21	4 0 29	28°45'32	4♈8	26°32	14° 5	12°47	23°55	14°18	9° 7	27°51	7°47	15°29	16°25	1°17	17°22	F 21
S 22	4 4 26	29°46'07	16°36	25°15	15°13	13°31	24° 2	14°25	9° 5	27°52	7°46	15°30	16°22	1°23	17°27	S 22
S 23	4 8 22	0♈46'42	29°18	24° 3	16°21	14°15	24° 8	14°32	9° 3	27°54	7°45	15°31	16°19	1°30	17°31	S 23
M24	4 12 19	1°47'19	12♈16	22°58	17°28	14°59	24°15	14°39	9° 0	27°55	7°44	15°33	16°16	1°37	17°36	M24
T 25	4 16 16	2°47'57	25°33	22° 3	18°36	15°43	24°22	14°46	8°58	27°56	7°43	15°33	16°12	1°43	17°40	T 25
W26	4 20 12	3°48'36	9♈12	21°19	19°43	16°28	24°29	14°53	8°56	27°57	7°42	15°R33	16° 9	1°50	17°45	W26
T 27	4 24 9	4°49'16	23°12	20°47	20°50	17°12	24°36	15° 0	8°54	27°58	7°41	15°33	16° 6	1°57	17°49	T 27
F 28	4 28 5	5°49'57	7♈34	20°25	21°57	17°56	24°44	15° 7	8°52	27°59	7°40	15°32	16° 3	2° 3	17°54	F 28
S 29	4 32 2	6°50'39	22°14	20°D16	23° 4	18°40	24°51	15°14	8°50	28° 0	7°39	15°31	16° 0	2°10	17°59	S 29
S 30	4 35 58	7♈51'22	7♈ 7	20♈17	24♈10	19♈25	24°59	15♈21	8♈48	28♈1	7♈38	15♈30	15♈57	2♈17	18♈3	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	decl	lat
S 1	14s23	9n34	4n36	23s29	2s56	25s24	2s17	20s11	0s25	15s 5	1s 6	20s47	1n27	14n21	0s28	2n 8	1n11	1s44	16s48	22s42	22s50	14s44	15s51	6n39					
S 2	14 42	14 35	3 49	23 39	2 56	25 31	2 19	20 21	0 25	15 4	1 5	20 48	1 27	14 20	0 28	2 8	1 11	1 44	16 48	22 41	22 50	14 46	15 51	6 38					
M 3	15 1	18 40	2 45	23 47	2 55	25 37	2 21	20 31	0 26	15 3	1 5	20 49	1 27	14 19	0 28	2 7	1 11	1 45	16 48	22 41	22 50	14 47	15 51	6 38					
T 4	15 20	21 25	1 30	23 52	2 53	25 42	2 24	20 40	0 26	15 1	1 5	20 50	1 27	14 18	0 28	2 6	1 11	1 45	16 48	22 40	22 49	14 49	15 51	6 38					
W 5	15 38	22 38	0 10	23 56	2 50	25 47	2 26	20 50	0 27	15 0	1 5	20 51	1 27	14 17	0 28	2 6	1 11	1 45	16 48	22 40	22 49	14 51	15 51	6 37					
T 6	15 56	22 16	1s 9	23 58	2 47	25 51	2 28	20 59	0 28	14 59	1 5	20 52	1 27	14 17	0 28	2 5	1 11	1 45	16 48	22 40	22 49	14 53	15 51	6 37					
F 7	16 14	20 31	2 21	23 57	2 42	25 54	2 29	21 8	0 28	14 57	1 5	20 53	1 27	14 16	0 28	2 4	1 11	1 46	16 48	22 40	22 48	14 55	15 51	6 36					
S 8	16 31	17 37	3 22	23 54	2 36	25 57	2 31	21 17	0 29	14 56	1 5	20 54	1 26	14 15	0 28	2 4	1 11	1 46	16 48	22 41	22 48	14 57	15 51	6 36					
S 9	16 49	13 56	4 12	23 48	2 28	25 58	2 33	21 26	0 29	14 54	1 4	20 55	1 26	14 14	0 28	2 3	1 11	1 46	16 48	22 41	22 48	14 58	15 51	6 35					
M10	17 6	9 42	4 47	23 39	2 20	25 59	2 34	21 34	0 30	14 53	1 4	20 56	1 26	14 14	0 28	2 3	1 11	1 46	16 48	22 41	22 47	15 0	15 51	6 35					
T 11	17 22	5 11	5 7	23 27	2 9	26 0	2 36	21 43	0 30	14 51	1 4	20 56	1 26	14 13	0 28	2 2	1 11	1 47	16 48	22 41	22 47	15 2	15 51	6 35					
W12	17 39	0 33	5 14	23 12	1 57	26 0	2 37	21 51	0 31	14 50	1 4	20 57	1 26	14 12	0 28	2 1	1 11	1 47	16 48	22 40	22 47	15 4	15 51	6 34					
T 13	17 55	4s 3	5 6	22 53	1 44	25 59	2 39	21 59	0 31	14 48	1 4	20 58	1 26	14 11	0 28	2 1	1 11	1 47	16 48	22 40	22 46	15 6	15 51	6 34					
F 14	18 11	8 27	4 46	22 31	1 29	25 57	2 40	22 6	0 32	14 46	1 4	20 59	1 26	14 11	0 28	2 0	1 11	1 47	16 48	22 40	22 46	15 7	15 51	6 33					
S 15	18 26	12 31	4 13	22 5	1 12	25 54	2 41	22 14	0 33	14 44	1 4	21 0	1 26	14 10	0 28	2 0	1 11	1 48	16 48	22 39	22 46	15 9	15 51	6 33					
S 16	18 41	16 6	3 29	21 36	0 54	25 51	2 42	22 21	0 33	14 42	1 4	21 1	1 26	14 9	0 28	1 59	1 11	1 48	16 47	22 39	22 46	15 11	15 51	6 33					
M17	18 56	19 3	2 36	21 4	0 35	25 47	2 43	22 28	0 34	14 40	1 3	21 2	1 26	14 8	0 28	1 59	1 11	1 48	16 47	22 38	22 45	15 13	15 51	6 32					
T 18	19 11	21 12	1 36	20 29	0 14	25 43	2 44	22 35	0 34	14 38	1 3	21 3	1 25	14 8	0 28	1 58	1 11	1 48	16 47	22 38	22 45	15 15	15 51	6 32					
W19	19 25	22 25	0 32	19 53	0n 6	25 38	2 44	22 42	0 35	14 36	1 3	21 4	1 25	14 7	0 28	1 58	1 11	1 49	16 47	22 38	22 45	15 16	15 50	6 32					
T 20	19 39	22 35	0n35	19 15	0 27	25 32	2 45	22 48	0 35	14 34	1 3	21 5	1 25	14 6	0 28	1 57	1 11	1 49	16 47	22 38	22 44	15 18	15 50	6 31					
F 21	19 52	21 40	1 41	18 37	0 47	25 25	2 45	22 54	0 36	14 32	1 3	21 6	1 25	14 5	0 28	1 57	1 11	1 49	16 47	22 38	22 44	15 20	15 50	6 31					
S 22	20 5	19 41	2 44	18 0	1 6	25 18	2 46	23 1	0 36	14 30	1 3	21 6	1 25	14 5	0 28	1 56	1 11	1 49	16 47	22 38	22 44	15 22	15 50	6 30					
S 23	20 18	16 42	3 40	17 25	1 23	25 10	2 46	23 6	0 37	14 27	1 3	21 7	1 25	14 4	0 27	1 56	1 11	1 49	16 47	22 38	22 43	15 23	15 50	6 30					
M24	20 30	12 52	4 25	16 54	1 39	25 2	2 46	23 12	0 37	14 25	1 3	21 8	1 25	14 3	0 27	1 55	1 11	1 49	16 46	22 38	22 43	15 25	15 49	6 30					
T 25	20 42	8 19	4 58	16 27	1 53	24 52	2 46	23 17	0 38	14 22	1 2	21 9	1 25	14 3	0 27	1 55	1 11	1 50	16 46	22 39	22 43	15 27	15 49	6 29					
W26	20 54	3 15	5 15	16 4	2 5	24 42	2 46	23 22	0 38	14 20	1 2	21 10	1 25	14 2	0 27	1 54	1 12	1 50	16 46	22 39	22 42	15 29	15 49	6 29					
T 27	21 5	2n 7	5 14	15 46	2 15	24 32	2 45	23 27	0 39	14 17	1 2	21 11	1 25	14 1	0 27	1 54	1 12	1 50	16 46	22 38	22 42	15 30	15 49	6 29					
F 28	21 16	7 30	4 54	15 33	2 23	24 21	2 45	23 32	0 39	14 15	1 2	21 12	1 25	14 1	0 27	1 54	1 12	1 50	16 46	22 38	22 42	15 32	15 48	6 29					
S 29	21 26	12 35	4 15	15 25	2 29	24 9	2 44	23 36	0 40	14 12	1 2	21 12	1 24	14 0	0 27	1 53	1 12	1 50	16 45	22 38	22 41	15 34	15 48	6 28					
S 30	21s36	16n59	3n17	15s21	2n33	23s57	2s44	23s40	0s40	14s 9	1s 2	21s13	1n24	13n59	0s27	1n53	1n12	1s50	16s45	22s38	22s41	15s36	15s48	6n28					

# ASTRODIENST EPHEMERIS for the year 2104

## geocentric

DECEMBER 2104

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 39 55	8°52'06	22°8'7	20°12'29	25°3'16	20°7'9	25°5'7	15°7'28	8°R45	28°17'2	7°R37	15°R29	15°7'53	2°12'23	18°3'8	M 1
T 2	4 43 51	9°52'52	7°11'5	20°50	26°22	20°54	25°15	15°35	8°B43	28°3'3	7°B36	15°R29	15°50	2°30	18°13	T 2
W 3	4 47 48	10°53'39	21°51	21°20	27°28	21°38	25°23	15°43	8°41	28°4'4	7°35	15°D29	15°47	2°37	18°18	W 3
T 4	4 51 45	11°54'27	6°20	21°58	28°34	22°23	25°32	15°50	8°39	28°5'5	7°35	15°29	15°44	2°43	18°23	T 4
F 5	4 55 41	12°55'16	20°27	22°43	29°39	23°7	25°40	15°57	8°38	28°6'6	7°34	15°29	15°41	2°50	18°28	F 5
S 6	4 59 38	13°56'07	4°17	23°33	0°44	23°52	25°49	16°4	8°36	28°7'7	7°33	15°29	15°37	2°57	18°33	S 6
S 7	5 3 34	14°56'58	17°21	24°29	1°49	24°37	25°57	16°11	8°34	28°8'8	7°32	15°30	15°34	3°3	18°38	S 7
M 8	5 7 31	15°57'51	0°12	25°30	2°54	25°22	26°6	16°18	8°32	28°9'9	7°31	15°R30	15°31	3°10	18°43	M 8
T 9	5 11 27	16°58'46	12°41	26°35	3°58	26°7	26°15	16°25	8°30	28°9'9	7°30	15°D30	15°28	3°17	18°48	T 9
W10	5 15 24	17°59'42	24°53	27°43	5°2	26°51	26°25	16°32	8°28	28°10'10	7°29	15°30	15°25	3°23	18°53	W10
T 11	5 19 20	19°0'38	6°53	28°55	6°6	27°36	26°34	16°39	8°27	28°11'11	7°29	15°30	15°22	3°30	18°58	T 11
F 12	5 23 17	20°1'36	18°45	0°9	7°10	28°21	26°43	16°46	8°25	28°11'11	7°28	15°30	15°18	3°37	19°3	F 12
S 13	5 27 14	21°2'36	0°135	1°25	8°13	29°6	26°53	16°54	8°23	28°12'12	7°27	15°31	15°15	3°44	19°9	S 13
S 14	5 31 10	22°3'36	12°24	2°44	9°16	29°52	27°2	17°1	8°22	28°13'13	7°26	15°31	15°12	3°50	19°14	S 14
M15	5 35 7	23°4'37	24°19	4°4	10°18	0°37	27°12	17°8	8°20	28°13'13	7°25	15°32	15°9	3°57	19°19	M15
T 16	5 39 3	24°5'40	6°20	5°25	11°20	1°22	27°22	17°15	8°19	28°14'14	7°25	15°33	15°6	4°4	19°24	T 16
W17	5 43 0	25°6'43	18°31	6°48	12°22	2°7	27°32	17°22	8°17	28°14'14	7°24	15°R33	15°3	4°10	19°30	W17
T 18	5 46 56	26°7'47	0°354	8°12	13°24	2°53	27°42	17°29	8°16	28°15'15	7°23	15°32	14°59	4°17	19°35	T 18
F 19	5 50 53	27°8'51	13°28	9°37	14°25	3°38	27°53	17°36	8°14	28°15'15	7°23	15°31	14°56	4°24	19°41	F 19
S 20	5 54 50	28°9'56	26°16	11°3	15°25	4°23	28°3	17°43	8°13	28°15'15	7°22	15°30	14°53	4°30	19°46	S 20
S 21	5 58 46	29°11'02	9°17	12°30	16°26	5°9	28°14	17°50	8°12	28°16'16	7°21	15°28	14°50	4°37	19°51	S 21
M22	6 2 43	0°12'08	22°32	13°57	17°26	5°54	28°24	17°57	8°11	28°16'16	7°21	15°26	14°47	4°44	19°57	M22
T 23	6 6 39	1°13'14	6°10	15°25	18°25	6°40	28°35	18°4	8°9	28°16'16	7°20	15°24	14°43	4°50	20°2	T 23
W24	6 10 36	2°14'20	19°41	16°54	19°24	7°26	28°46	18°11	8°8	28°16'16	7°19	15°23	14°40	4°57	20°8	W24
T 25	6 14 32	3°15'27	3°15'27	18°23	20°22	8°11	28°57	18°18	8°7	28°17'17	7°19	15°D22	14°37	5°4	20°13	T 25
F 26	6 18 29	4°16'34	17°43	19°52	21°20	8°57	29°8	18°25	8°6	28°17'17	7°18	15°23	14°34	5°10	20°19	F 26
S 27	6 22 25	5°17'40	2°1	21°22	22°18	9°43	29°19	18°32	8°5	28°17'17	7°18	15°24	14°31	5°17	20°24	S 27
S 28	6 26 22	6°18'47	16°28	22°52	23°15	10°28	29°30	18°39	8°4	28°17'17	7°17	15°25	14°28	5°24	20°30	S 28
M29	6 30 19	7°19'54	1°11	24°23	24°11	11°14	29°42	18°46	8°3	28°17'17	7°17	15°27	14°24	5°30	20°35	M29
T 30	6 34 15	8°21'01	15°32	25°54	25°7	12°0	29°53	18°53	8°2	28°R17	7°16	15°R27	14°21	5°37	20°41	T 30
W31	6 38 12	9°22'09	29°1158	27°25	26°2	12°346	0°115	18°59	8°1	28°17'17	7°16	15°26	14°18	5°44	20°47	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	21s46	20n19	2n 6	15s22	2n35	23s44	2s43	23s44	0s41	14s 7	1 s 2	21s14	1n24	13n59	0s27	1n53	1n12	1s50	16s45	22s38	22s41	15s37	15s48	6n28			
T 2	21 55	22 15	0 47	15 27	2 36	23 31	2 42	23 48	0 41	14 4	1 s 2	21 15	1 24	13 58	0 27	1 52	1 12	1 50	16 45	22 38	22 40	15 39	15 47	6 27			
W 3	22 4	22 35	0s35	15 35	2 35	23 17	2 41	23 51	0 42	14 1	1 1	21 16	1 24	13 58	0 27	1 52	1 12	1 50	16 45	22 38	22 40	15 41	15 47	6 27			
T 4	22 12	21 23	1 53	15 47	2 33	23 2	2 39	23 55	0 42	13 58	1 1	21 17	1 24	13 57	0 27	1 52	1 12	1 51	16 44	22 38	22 40	15 43	15 46	6 27			
F 5	22 20	18 52	3 2	16 1	2 30	22 47	2 38	23 57	0 43	13 55	1 1	21 17	1 24	13 56	0 27	1 51	1 12	1 51	16 44	22 38	22 39	15 44	15 46	6 27			
S 6	22 28	15 21	3 59	16 17	2 27	22 31	2 36	24 0	0 43	13 52	1 1	21 18	1 24	13 56	0 27	1 51	1 12	1 51	16 44	22 38	22 39	15 46	15 46	6 26			
S 7	22 35	11 10	4 40	16 35	2 22	22 15	2 35	24 3	0 44	13 49	1 1	21 19	1 24	13 55	0 27	1 51	1 12	1 51	16 44	22 38	22 39	15 48	15 45	6 26			
M 8	22 41	6 37	5 7	16 54	2 17	21 58	2 33	24 5	0 44	13 46	1 1	21 20	1 24	13 55	0 27	1 50	1 12	1 51	16 44	22 38	22 38	15 49	15 45	6 26			
T 9	22 47	1 54	5 17	17 15	2 12	21 41	2 31	24 7	0 45	13 43	1 1	21 21	1 24	13 54	0 27	1 50	1 12	1 51	16 43	22 38	22 38	15 51	15 44	6 26			
W10	22 53	2s46	5 14	17 36	2 6	21 24	2 28	24 8	0 45	13 39	1 1	21 21	1 24	13 53	0 27	1 50	1 12	1 51	16 43	22 38	22 38	15 53	15 44	6 25			
T 11	22 58	7 16	4 56	17 58	1 59	21 6	2 26	24 10	0 45	13 36	1 1	21 22	1 24	13 53	0 27	1 50	1 12	1 51	16 43	22 38	22 37	15 54	15 43	6 25			
F 12	23 3	11 26	4 26	18 20	1 52	20 47	2 23	24 11	0 46	13 33	1 1	21 23	1 24	13 52	0 27	1 50	1 12	1 51	16 43	22 38	22 37	15 56	15 43	6 25			
S 13	23 7	15 10	3 45	18 43	1 45	20 28	2 21	24 12	0 46	13 30	1 0	21 24	1 24	13 52	0 27	1 49	1 12	1 51	16 42	22 38	22 37	15 58	15 42	6 25			
S 14	23 11	18 19	2 54	19 5	1 38	20 9	2 18	24 12	0 47	13 26	1 0	21 24	1 24	13 51	0 27	1 49	1 12	1 51	16 42	22 38	22 36	15 59	15 42	6 25			
M15	23 15	20 42	1 55	19 28	1 31	19 49	2 15	24 13	0 47	13 23	1 0	21 25	1 24	13 51	0 27	1 49	1 12	1 51	16 42	22 38	22 36	16 1	15 41	6 24			
T 16	23 18	22 11	0 51	19 50	1 23	19 28	2 12	24 13	0 48	13 19	1 0	21 26	1 24	13 51	0 27	1 49	1 12	1 51	16 42	22 38	22 36	16 3	15 41	6 24			
W17	23 20	22 39	0n17	20 12	1 16	19 8	2 8	24 13	0 48	13 16	1 0	21 26	1 23	13 50	0 27	1 49	1 13	1 51	16 41	22 38	22 35	16 4	15 40	6 24			
T 18	23 22	22 1	1 24	20 33	1 8	18 47	2 5	24 12	0 49	13 12	1 0	21 27	1 23	13 50	0 27	1 49	1 13	1 51	16 41	22 38	22 35	16 6	15 40	6 24			
F 19	23 24	20 17	2 29	20 53	1 0	18 25	2 1	24 11	0 49	13 8	1 0	21 28	1 23	13 49	0 27	1 48	1 13	1 51	16 41	22 38	22 34	16 8	15 39	6 24			
S 20	23 25	17 30	3 27	21 13	0 52	18 4	1 57	24 11	0 49	13 5	1 0	21 28	1 23	13 49	0 27	1 48	1 13	1 51	16 40	22 38	22 34	16 9	15 39	6 23			
S 21	23 25	13 49	4 16	21 33	0 45	17 42	1 53	24 9	0 50	13 1	1 0	21 29	1 23	13 48	0 27	1 48	1 13	1 50	16 40	22 38	22 34	16 11	15 38	6 23			
M22	23 25	9 24	4 51	21 51	0 37	17 20	1 49	24 8	0 50	12 57	1 0	21 30	1 23	13 48	0 27	1 48	1 13	1 50	16 40	22 38	22 33	16 13	15 37	6 23			
T 23	23 25	4 28	5 12	22 9	0 29	16 57	1 44	24 6	0 51	12 53	0 59	21 30	1 23	13 48	0 27	1 48	1 13	1 50	16 40	22 38	22 33	16 14	15 37	6 23			
W24	23 24	0n45	5 15	22 25	0 22	16 34	1 39	24 4	0 51	12 49	0 59	21 31	1 23	13 47	0 27	1 48	1 13	1 50	16 39	22 37	22 33	16 16	15 36	6 23			
T 25	23 23	6 1	5 0	22 41	0 14	16 11	1 35	24 2	0 51	12 46	0 59	21 32	1 23	13 47	0 27	1 48	1 13	1 50	16 39	22 37	22 32	16 18	15 35	6 23			
F 26	23 21	11 4	4 27	22 55	0 7	15 48	1 30	23 59	0 52	12 42	0 59	21 32	1 23	13 47	0 27	1 48	1 13	1 50	16 39	22 37	22 32	16 19	15 35	6 23			
S 27	23 19	15 34	3 37	23 9	0s 0	15 24	1 24	23 56	0 52	12 38	0 59	21 33	1 23	13 46	0 27	1 48	1 13	1 50	16 38	22 38	22 32	16 21	15 34	6 23			
S 28	23 16	19 12	2 33	23 22	0 8	15 0	1 19	23 53	0 53	12 34	0 59	21 34	1 23	13 46	0 27	1 48	1 13	1 50	16 38	22 38	22 31	16 22	15 33	6 23			
M29	23 13	21 38	1 19	23 33	0 15	14 36	1 13	23 50	0 53	12 30	0 59	21 34	1 23	13 46	0 27	1 48	1 13	1 50	16 38	22 38	22 31	16 24	15 33	6 22			
T 30	23 10	22 38	0s 0	23 43	0 22	14 12	1 7	23 46	0 53	12 25	0 59	21 35	1 23	13 46	0 27	1 48	1 13	1 50	16 37	22 38	22 30	16 26	15 32	6 22			
W31	23s 6	22n 6	1s19	23s52	0s28	13s48	1s 1	23s42	0s54	12s21	0s59	21s35	1n23	13n45	0s27	1n48	1n13	1s49	16s37	22s38	22s30	16s27	15s31	6n22			