



# Astrodienst Ephemeris Tables for the year 1769

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 1769  
geocentric

JANUARY 1769

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
S 1	6 43 38	10 <sup>3</sup> 58'20	22 <sup>2</sup> 21	24 <sup>2</sup> 54	15 <sup>2</sup> 26	3 <sup>8</sup> 34	16 <sup>1</sup> 47	15°R 2	3°R29	9°R29	13 <sup>3</sup> 25	3 <sup>3</sup> 4	2 <sup>3</sup> 48	14 <sup>1</sup> 15	16 <sup>1</sup> 25	S 1
M 2	6 47 34	11°59'30	4 <sup>1</sup> 13	26°22	16°40	3°55	16°57	14 <sup>2</sup> 57	3 <sup>8</sup> 28	9 <sup>1</sup> 28	13°27	3° 4	2°45	14°22	16°27	M 2
T 3	6 51 31	13° 0'41	16° 2	27°51	17°53	4°17	17° 7	14°52	3°28	9°27	13°29	3° 5	2°41	14°28	16°29	T 3
W 4	6 55 27	14° 1'52	27°54	29°21	19° 6	4°38	17°16	14°47	3°27	9°27	13°31	3° 6	2°38	14°35	16°31	W 4
T 5	6 59 24	15° 3'02	9 <sup>2</sup> 52	0 <sup>3</sup> 51	20°20	5° 0	17°26	14°42	3°27	9°26	13°33	3° 8	2°35	14°42	16°33	T 5
F 6	7 3 20	16° 4'13	21°58	2°22	21°33	5°23	17°36	14°37	3°27	9°25	13°35	3° 8	2°32	14°48	16°35	F 6
S 7	7 7 17	17° 5'24	4 <sup>3</sup> 16	3°53	22°46	5°45	17°45	14°32	3°26	9°24	13°37	3°R 9	2°29	14°55	16°37	S 7
S 8	7 11 13	18° 6'34	16°48	5°24	23°59	6° 9	17°55	14°27	3°26	9°23	13°39	3° 8	2°26	15° 2	16°40	S 8
M 9	7 15 10	19° 7'44	29°33	6°56	25°12	6°32	18° 4	14°22	3°26	9°22	13°41	3° 7	2°22	15° 8	16°42	M 9
T 10	7 19 7	20° 8'53	12 <sup>2</sup> 33	8°29	26°25	6°56	18°13	14°18	3°26	9°21	13°43	3° 5	2°19	15°15	16°44	T 10
W 11	7 23 3	21°10'02	25°47	10° 2	27°39	7°20	18°22	14°13	3°D26	9°21	13°45	3° 2	2°16	15°22	16°47	W 11
T 12	7 27 0	22°11'10	9 <sup>1</sup> 13	11°35	28°51	7°44	18°31	14° 8	3°26	9°20	13°47	2°59	2°13	15°28	16°49	T 12
F 13	7 30 56	23°12'18	22°52	13° 9	0 <sup>1</sup> 4	8° 9	18°40	14° 3	3°26	9°18	13°49	2°57	2°10	15°35	16°52	F 13
S 14	7 34 53	24°13'25	6 <sup>1</sup> 41	14°44	1°17	8°34	18°49	13°58	3°26	9°17	13°51	2°55	2° 6	15°42	16°54	S 14
S 15	7 38 49	25°14'30	20°40	16°19	2°30	8°59	18°57	13°53	3°26	9°16	13°53	2°D54	2° 3	15°48	16°57	S 15
M 16	7 42 46	26°15'35	4 <sup>3</sup> 48	17°54	3°43	9°25	19° 6	13°48	3°27	9°15	13°55	2°54	2° 0	15°55	16°59	M 16
T 17	7 46 42	27°16'39	19° 2	19°30	4°55	9°51	19°14	13°44	3°27	9°14	13°57	2°55	1°57	16° 2	17° 2	T 17
W 18	7 50 39	28°17'43	3 <sup>1</sup> 11	21° 7	6° 8	10°17	19°23	13°39	3°27	9°13	13°59	2°57	1°54	16° 9	17° 5	W 18
T 19	7 54 36	29°18'45	17°41	22°44	7°20	10°43	19°31	13°34	3°28	9°12	14° 1	2°58	1°51	16°15	17° 8	T 19
F 20	7 58 32	0 <sup>2</sup> 19'46	2 <sup>2</sup> 0	24°22	8°32	11°10	19°39	13°30	3°28	9°11	14° 4	2°R59	1°47	16°22	17°10	F 20
S 21	8 2 29	1°20'46	16°12	26° 1	9°45	11°37	19°46	13°25	3°29	9° 9	14° 5	2°58	1°44	16°29	17°13	S 21
S 22	8 6 25	2°21'46	0 <sup>2</sup> 14	27°40	10°57	12° 4	19°54	13°20	3°29	9° 8	14° 7	2°56	1°41	16°35	17°16	S 22
M 23	8 10 22	3°22'44	14° 1	29°19	12° 9	12°31	20° 2	13°16	3°30	9° 7	14° 9	2°52	1°38	16°42	17°19	M 23
T 24	8 14 18	4°23'42	27°30	1 <sup>2</sup> 0	13°21	12°59	20° 9	13°11	3°30	9° 6	14°11	2°47	1°35	16°49	17°22	T 24
W 25	8 18 15	5°24'38	10 <sup>1</sup> 40	2°41	14°33	13°26	20°17	13° 7	3°31	9° 4	14°13	2°42	1°32	16°55	17°25	W 25
T 26	8 22 11	6°25'34	23°29	4°22	15°45	13°54	20°24	13° 3	3°32	9° 3	14°15	2°36	1°28	17° 2	17°28	T 26
F 27	8 26 8	7°26'29	5 <sup>2</sup> 58	6° 5	16°56	14°23	20°31	12°58	3°33	9° 2	14°17	2°31	1°25	17° 9	17°31	F 27
S 28	8 30 5	8°27'23	18°12	7°48	18° 8	14°51	20°38	12°54	3°34	9° 0	14°19	2°27	1°22	17°15	17°34	S 28
S 29	8 34 1	9°28'17	0 <sup>1</sup> 13	9°31	19°20	15°20	20°44	12°50	3°34	8°59	14°21	2°25	1°19	17°22	17°37	S 29
M 30	8 37 58	10°29'10	12° 5	11°16	20°31	15°48	20°51	12°46	3°35	8°57	14°23	2°D25	1°16	17°29	17°40	M 30
T 31	8 41 54	11 <sup>2</sup> 30'02	23 <sup>1</sup> 15	13 <sup>2</sup> 1	21 <sup>1</sup> 42	16 <sup>2</sup> 17	20 <sup>1</sup> 15	12 <sup>2</sup> 42	3 <sup>3</sup> 36	8 <sup>1</sup> 56	14 <sup>2</sup> 25	2 <sup>3</sup> 25	1 <sup>2</sup> 12	17 <sup>1</sup> 35	17 <sup>1</sup> 43	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	23s 1	13s20	5s 0	23s29	0s 7	17s57	1s48	13n54	1n15	15s52	1n 2	22n17	0s21	12n15	0s28	8n50	0n52	21s41	1n 6	23s26	23s26	19s49	1s27	4n15	
M 2	22 56	17 12	4 32	23 39	0 14	17 34	1 47	14 2	1 16	15 55	1 2	22 17	0 21	12 15	0 28	8 50	0 52	21 41	1 6	23 26	23 26	19 51	1 26	4 15	
T 3	22 50	20 22	3 53	23 48	0 21	17 11	1 47	14 10	1 17	15 58	1 2	22 18	0 21	12 15	0 28	8 51	0 53	21 41	1 6	23 26	23 27	19 52	1 26	4 15	
W 4	22 44	22 41	3 3	23 56	0 28	16 47	1 46	14 18	1 18	16 1	1 3	22 19	0 20	12 14	0 28	8 51	0 53	21 41	1 6	23 26	23 27	19 53	1 25	4 15	
T 5	22 37	24 2	2 6	24 3	0 35	16 23	1 45	14 26	1 19	16 3	1 3	22 19	0 20	12 14	0 28	8 51	0 53	21 41	1 6	23 26	23 27	19 55	1 25	4 14	
F 6	22 30	24 15	1 2	24 8	0 41	15 58	1 44	14 35	1 19	16 6	1 3	22 20	0 20	12 14	0 28	8 52	0 53	21 41	1 6	23 26	23 27	19 56	1 24	4 14	
S 7	22 23	23 18	0n 6	24 12	0 48	15 33	1 42	14 43	1 20	16 8	1 3	22 20	0 20	12 14	0 28	8 52	0 53	21 41	1 6	23 26	23 27	19 58	1 23	4 14	
S 8	22 15	21 10	1 15	24 15	0 54	15 8	1 41	14 51	1 21	16 11	1 3	22 21	0 20	12 14	0 28	8 52	0 53	21 41	1 6	23 26	23 27	19 59	1 23	4 13	
M 9	22 6	17 58	2 21	24 17	1 0	14 42	1 40	15 0	1 22	16 13	1 3	22 22	0 20	12 14	0 28	8 53	0 53	21 41	1 6	23 26	23 27	20 1	1 22	4 13	
T 10	21 57	13 51	3 21	24 18	1 6	14 16	1 38	15 8	1 22	16 16	1 3	22 22	0 20	12 14	0 28	8 53	0 53	21 40	1 6	23 26	23 27	20 2	1 21	4 13	
W 11	21 48	9 0	4 11	24 17	1 11	13 49	1 37	15 17	1 23	16 18	1 3	22 23	0 20	12 14	0 28	8 54	0 53	21 40	1 6	23 26	23 27	20 3	1 21	4 13	
T 12	21 38	3 40	4 49	24 14	1 17	13 22	1 35	15 26	1 24	16 21	1 3	22 24	0 20	12 14	0 28	8 54	0 53	21 40	1 5	23 26	23 27	20 5	1 20	4 12	
F 13	21 28	1n55	5 10	24 11	1 22	12 55	1 34	15 34	1 24	16 23	1 3	22 24	0 19	12 14	0 28	8 54	0 53	21 40	1 5	23 26	23 27	20 6	1 19	4 12	
S 14	21 18	7 28	5 14	24 6	1 27	12 28	1 32	15 43	1 25	16 25	1 4	22 25	0 19	12 14	0 28	8 55	0 53	21 40	1 5	23 26	23 27	20 8	1 19	4 12	
S 15	21 7	12 43	5 0	23 59	1 32	12 0	1 30	15 52	1 26	16 28	1 4	22 26	0 19	12 14	0 28	8 55	0 53	21 40	1 5	23 26	23 27	20 9	1 18	4 12	
M 16	20 56	17 20	4 28	23 51	1 36	11 31	1 28	16 0	1 26	16 30	1 4	22 26	0 19	12 15	0 28	8 56	0 53	21 40	1 5	23 26	23 27	20 10	1 17	4 11	
T 17	20 44	21 0	3 39	23 42	1 40	11 3	1 26	16 9	1 27	16 32	1 4	22 27	0 19	12 15	0 28	8 56	0 53	21 40	1 5	23 26	23 27	20 12	1 16	4 11	
W 18	20 32	23 24	2 36	23 31	1 44	10 34	1 24	16 18	1 27	16 34	1 4	22 27	0 19	12 15	0 28	8 57	0 53	21 39	1 5	23 26	23 27	20 13	1 15	4 11	
T 19	20 19	24 17	1 23	23 19	1 48	10 5	1 21	16 27	1 28	16 36	1 4	22 28	0 19	12 15	0 28	8 57	0 53	21 39	1 5	23 26	23 27	20 15	1 14	4 11	
F 20	20 6	23 33	0 5	23 5	1 51	9 36	1 19	16 36	1 28	16 38	1 4	22 28	0 19	12 15	0 28	8 57	0 53	21 39	1 5	23 26	23 27	20 16	1 14	4 11	
S 21	19 53	21 18	1s12	22 50	1 54	9 7	1 17	16 45	1 29	16 40	1 4	22 29	0 19	12 15	0 28	8 58	0 53	21 39	1 5	23 26	23 27	20 17	1 13	4 10	
S 22	19 39	17 47	2 24	22 33	1 56	8 37	1 14	16 53	1 29	16 42	1 5	22 30	0 18	12 16	0 28	8 58	0 53	21 39	1 5	23 26	23 28	20 19	1 12	4 10	
M 23	19 25	13 21	3 26	22 15	1 59	8 7	1 12	17 2	1 30	16 44	1 5	22 30	0 18	12 16	0 28	8 59	0 53	21 39	1 5	23 26	23 28	20 20	1 11	4 10	
T 24	19 11	8 22	4 15	21 55	2 1	7 37	1 9	17 11	1 30	16 46	1 5	22 31	0 18	12 16	0 28	8 59	0 53	21 39	1 4	23 26	23 28	20 21	1 10	4 10	
W 25	18 56	3 7	4 49	21 34	2 2	7 7	1 6	17 20	1 30	16 48	1 5	22 31	0 18	12 16	0 28	9 0	0 53	21 39	1 4	23 27	23 28	20 23	1 9	4 9	
T 26	18 41	2s 7	5 8	21 11	2 3	6 36	1 4	17 29	1 31	16 49	1 5	22 32	0 18	12 17	0 28	9 1	0 53	21 38	1 4	23 27	23 28	20 24	1 8	4 9	
F 27	18 26	7 8	5 11	20 47	2 4	6 6	1 1	17 37	1 31	16 51	1 5	22 32	0 18	12 17	0 27	9 1	0 53	21 38	1 4	23 27	23 28	20 25	1 7	4 9	
S 28	18 10	11 46	5 0	20 21	2 5	5 35	0 58	17 46	1 32	16 53	1 5	22 33	0 18	12 17	0 27	9 2	0 53	21 38	1 4	23 27	23 28	20 27	1 6	4 9	
S 29	17 54	15 52	4 36	19 53	2 5	5 4	0 55	17 55	1 32	16 55	1 5	22 33	0 18	12 18	0 27	9 2	0 53	21 38	1 4	23 27	23 28	20 28	1 5	4 9	
M 30	17 38	19 17	4 0	19 24	2 4	4 33	0 52	18 4	1 32	16 56	1 6	22 34	0 17	12 18	0 27	9 3	0 53	21 38	1 4	23 27	23 28	20 29	1 4	4 8	
T 31	17s21	21s55	3s14	18s54	2s 3	4s 2	0s48	18n13	1n33	16s58	1n 6	22n34	0s17	12n18	0s27	9n 3	0n53	21s38	1n 4	23s27	23s28	20s31	1s 3	4n 8	

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

FEBRUARY 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 45 51	12 <sup>30</sup> 53	5 <sup>47</sup> 47	14 <sup>47</sup> 47	22 <sup>54</sup> 54	16 <sup>46</sup> 46	21 <sup>11</sup> 4	12 <sup>2</sup> R38	3 <sup>37</sup> 37	8 <sup>55</sup> 55	14 <sup>27</sup> 27	2 <sup>27</sup> 27	1 <sup>9</sup> 9	17 <sup>42</sup> 42	17 <sup>46</sup> 46	W 1
T 2	8 49 47	13 <sup>31</sup> 43	17 <sup>46</sup> 46	16 <sup>33</sup> 33	24 <sup>5</sup> 5	17 <sup>16</sup> 16	21 <sup>10</sup> 10	12 <sup>34</sup> 34	3 <sup>39</sup> 39	8 <sup>53</sup> 53	14 <sup>29</sup> 29	2 <sup>29</sup> 29	1 <sup>6</sup> 6	17 <sup>49</sup> 49	17 <sup>50</sup> 50	T 2
F 3	8 53 44	14 <sup>32</sup> 32	29 <sup>57</sup> 57	18 <sup>20</sup> 20	25 <sup>16</sup> 16	17 <sup>45</sup> 45	21 <sup>16</sup> 16	12 <sup>30</sup> 30	3 <sup>40</sup> 40	8 <sup>52</sup> 52	14 <sup>30</sup> 30	2 <sup>30</sup> 30	1 <sup>3</sup> 3	17 <sup>55</sup> 55	17 <sup>53</sup> 53	F 3
S 4	8 57 40	15 <sup>33</sup> 20	12 <sup>32</sup> 32	20 <sup>8</sup> 8	26 <sup>27</sup> 27	18 <sup>15</sup> 15	21 <sup>22</sup> 22	12 <sup>26</sup> 26	3 <sup>41</sup> 41	8 <sup>50</sup> 50	14 <sup>32</sup> 32	2 <sup>29</sup> 29	1 <sup>0</sup> 0	18 <sup>2</sup> 2	17 <sup>56</sup> 56	S 4
S 5	9 1 37	16 <sup>34</sup> 07	25 <sup>8</sup> 8	21 <sup>56</sup> 56	27 <sup>38</sup> 38	18 <sup>45</sup> 45	21 <sup>27</sup> 27	12 <sup>23</sup> 23	3 <sup>42</sup> 42	8 <sup>49</sup> 49	14 <sup>34</sup> 34	2 <sup>27</sup> 27	0 <sup>57</sup> 57	18 <sup>9</sup> 9	17 <sup>59</sup> 59	S 5
M 6	9 5 34	17 <sup>34</sup> 53	8 <sup>12</sup> 12	23 <sup>45</sup> 45	28 <sup>48</sup> 48	19 <sup>15</sup> 15	21 <sup>33</sup> 33	12 <sup>19</sup> 19	3 <sup>44</sup> 44	8 <sup>47</sup> 47	14 <sup>36</sup> 36	2 <sup>22</sup> 22	0 <sup>53</sup> 53	18 <sup>16</sup> 16	18 <sup>3</sup> 3	M 6
T 7	9 9 30	18 <sup>35</sup> 37	21 <sup>35</sup> 35	25 <sup>34</sup> 34	29 <sup>59</sup> 59	19 <sup>45</sup> 45	21 <sup>38</sup> 38	12 <sup>16</sup> 16	3 <sup>45</sup> 45	8 <sup>46</sup> 46	14 <sup>38</sup> 38	2 <sup>15</sup> 15	0 <sup>50</sup> 50	18 <sup>22</sup> 22	18 <sup>6</sup> 6	T 7
W 8	9 13 27	19 <sup>36</sup> 20	5 <sup>16</sup> 16	27 <sup>23</sup> 23	1 <sup>9</sup> 9	20 <sup>15</sup> 15	21 <sup>43</sup> 43	12 <sup>12</sup> 12	3 <sup>46</sup> 46	8 <sup>44</sup> 44	14 <sup>39</sup> 39	2 <sup>7</sup> 7	0 <sup>47</sup> 47	18 <sup>29</sup> 29	18 <sup>9</sup> 9	W 8
T 9	9 17 23	20 <sup>37</sup> 01	19 <sup>11</sup> 11	29 <sup>13</sup> 13	2 <sup>20</sup> 20	20 <sup>46</sup> 46	21 <sup>49</sup> 49	12 <sup>9</sup> 9	3 <sup>48</sup> 48	8 <sup>42</sup> 42	14 <sup>41</sup> 41	1 <sup>59</sup> 59	0 <sup>44</sup> 44	18 <sup>36</sup> 36	18 <sup>13</sup> 13	T 9
F 10	9 21 20	21 <sup>37</sup> 41	3 <sup>16</sup> 16	1 <sup>2</sup> 2	3 <sup>30</sup> 30	21 <sup>17</sup> 17	21 <sup>53</sup> 53	12 <sup>6</sup> 6	3 <sup>49</sup> 49	8 <sup>41</sup> 41	14 <sup>43</sup> 43	1 <sup>51</sup> 51	0 <sup>41</sup> 41	18 <sup>42</sup> 42	18 <sup>16</sup> 16	F 10
S 11	9 25 16	22 <sup>38</sup> 20	17 <sup>26</sup> 26	2 <sup>52</sup> 52	4 <sup>40</sup> 40	21 <sup>47</sup> 47	21 <sup>58</sup> 58	12 <sup>2</sup> 2	3 <sup>51</sup> 51	8 <sup>39</sup> 39	14 <sup>45</sup> 45	1 <sup>45</sup> 45	0 <sup>38</sup> 38	18 <sup>49</sup> 49	18 <sup>20</sup> 20	S 11
S 12	9 29 13	23 <sup>38</sup> 56	1 <sup>38</sup> 38	4 <sup>41</sup> 41	5 <sup>50</sup> 50	22 <sup>18</sup> 18	22 <sup>3</sup> 3	11 <sup>59</sup> 59	3 <sup>52</sup> 52	8 <sup>38</sup> 38	14 <sup>46</sup> 46	1 <sup>40</sup> 40	0 <sup>34</sup> 34	18 <sup>56</sup> 56	18 <sup>23</sup> 23	S 12
M13	9 33 9	24 <sup>39</sup> 31	15 <sup>49</sup> 49	6 <sup>29</sup> 29	6 <sup>59</sup> 59	22 <sup>49</sup> 49	22 <sup>7</sup> 7	11 <sup>56</sup> 56	3 <sup>54</sup> 54	8 <sup>36</sup> 36	14 <sup>48</sup> 48	1 <sup>38</sup> 38	0 <sup>31</sup> 31	19 <sup>2</sup> 2	18 <sup>27</sup> 27	M13
T 14	9 37 6	25 <sup>40</sup> 04	29 <sup>57</sup> 57	8 <sup>16</sup> 16	8 <sup>9</sup> 9	23 <sup>21</sup> 21	22 <sup>11</sup> 11	11 <sup>53</sup> 53	3 <sup>56</sup> 56	8 <sup>34</sup> 34	14 <sup>50</sup> 50	1 <sup>39</sup> 39	0 <sup>28</sup> 28	19 <sup>9</sup> 9	18 <sup>30</sup> 30	T 14
W15	9 41 3	26 <sup>40</sup> 35	14 <sup>11</sup> 11	10 <sup>2</sup> 2	9 <sup>18</sup> 18	23 <sup>52</sup> 52	22 <sup>15</sup> 15	11 <sup>51</sup> 51	3 <sup>58</sup> 58	8 <sup>33</sup> 33	14 <sup>51</sup> 51	1 <sup>39</sup> 39	0 <sup>25</sup> 25	19 <sup>16</sup> 16	18 <sup>34</sup> 34	W15
T 16	9 44 59	27 <sup>41</sup> 04	27 <sup>57</sup> 57	11 <sup>47</sup> 47	10 <sup>28</sup> 28	24 <sup>23</sup> 23	22 <sup>19</sup> 19	11 <sup>48</sup> 48	3 <sup>59</sup> 59	8 <sup>31</sup> 31	14 <sup>53</sup> 53	1 <sup>39</sup> 39	0 <sup>22</sup> 22	19 <sup>22</sup> 22	18 <sup>37</sup> 37	T 16
F 17	9 48 56	28 <sup>41</sup> 32	11 <sup>34</sup> 34	13 <sup>29</sup> 29	11 <sup>37</sup> 37	24 <sup>55</sup> 55	22 <sup>23</sup> 23	11 <sup>45</sup> 45	4 <sup>1</sup> 1	8 <sup>30</sup> 30	14 <sup>55</sup> 55	1 <sup>39</sup> 39	0 <sup>18</sup> 18	19 <sup>29</sup> 29	18 <sup>41</sup> 41	F 17
S 18	9 52 52	29 <sup>41</sup> 58	25 <sup>33</sup> 33	15 <sup>9</sup> 9	12 <sup>46</sup> 46	25 <sup>27</sup> 27	22 <sup>26</sup> 26	11 <sup>43</sup> 43	4 <sup>3</sup> 3	8 <sup>28</sup> 28	14 <sup>56</sup> 56	1 <sup>36</sup> 36	0 <sup>15</sup> 15	19 <sup>36</sup> 36	18 <sup>44</sup> 44	S 18
S 19	9 56 49	0 <sup>42</sup> 21	9 <sup>9</sup> 9	16 <sup>46</sup> 46	13 <sup>55</sup> 55	25 <sup>59</sup> 59	22 <sup>30</sup> 30	11 <sup>40</sup> 40	4 <sup>5</sup> 5	8 <sup>26</sup> 26	14 <sup>58</sup> 58	1 <sup>31</sup> 31	0 <sup>12</sup> 12	19 <sup>42</sup> 42	18 <sup>48</sup> 48	S 19
M20	10 0 45	1 <sup>42</sup> 43	22 <sup>33</sup> 33	18 <sup>19</sup> 19	15 <sup>3</sup> 3	26 <sup>30</sup> 30	22 <sup>33</sup> 33	11 <sup>38</sup> 38	4 <sup>7</sup> 7	8 <sup>25</sup> 25	14 <sup>59</sup> 59	1 <sup>24</sup> 24	0 <sup>9</sup> 9	19 <sup>49</sup> 49	18 <sup>51</sup> 51	M20
T 21	10 4 42	2 <sup>43</sup> 03	5 <sup>11</sup> 11	19 <sup>48</sup> 48	16 <sup>12</sup> 12	27 <sup>2</sup> 2	22 <sup>36</sup> 36	11 <sup>36</sup> 36	4 <sup>9</sup> 9	8 <sup>23</sup> 23	15 <sup>1</sup> 1	1 <sup>14</sup> 14	0 <sup>6</sup> 6	19 <sup>56</sup> 56	18 <sup>55</sup> 55	T 21
W22	10 8 38	3 <sup>43</sup> 22	18 <sup>42</sup> 42	21 <sup>12</sup> 12	17 <sup>20</sup> 20	27 <sup>35</sup> 35	22 <sup>39</sup> 39	11 <sup>34</sup> 34	4 <sup>11</sup> 11	8 <sup>21</sup> 21	15 <sup>2</sup> 2	1 <sup>2</sup> 2	0 <sup>3</sup> 3	20 <sup>2</sup> 2	18 <sup>59</sup> 59	W22
T 23	10 12 35	4 <sup>43</sup> 38	1 <sup>12</sup> 12	22 <sup>31</sup> 31	18 <sup>28</sup> 28	28 <sup>7</sup> 7	22 <sup>41</sup> 41	11 <sup>32</sup> 32	4 <sup>13</sup> 13	8 <sup>20</sup> 20	15 <sup>4</sup> 4	0 <sup>50</sup> 50	29 <sup>59</sup> 59	20 <sup>9</sup> 9	19 <sup>2</sup> 2	T 23
F 24	10 16 32	5 <sup>43</sup> 53	13 <sup>49</sup> 49	23 <sup>44</sup> 44	19 <sup>36</sup> 36	28 <sup>39</sup> 39	22 <sup>44</sup> 44	11 <sup>30</sup> 30	4 <sup>15</sup> 15	8 <sup>18</sup> 18	15 <sup>5</sup> 5	0 <sup>40</sup> 40	29 <sup>56</sup> 56	20 <sup>16</sup> 16	19 <sup>6</sup> 6	F 24
S 25	10 20 28	6 <sup>44</sup> 07	26 <sup>1</sup> 1	24 <sup>49</sup> 49	20 <sup>43</sup> 43	29 <sup>12</sup> 12	22 <sup>46</sup> 46	11 <sup>28</sup> 28	4 <sup>17</sup> 17	8 <sup>16</sup> 16	15 <sup>7</sup> 7	0 <sup>30</sup> 30	29 <sup>53</sup> 53	20 <sup>22</sup> 22	19 <sup>10</sup> 10	S 25
S 26	10 24 25	7 <sup>44</sup> 19	8 <sup>11</sup> 11	25 <sup>48</sup> 48	21 <sup>51</sup> 51	29 <sup>44</sup> 44	22 <sup>48</sup> 48	11 <sup>27</sup> 27	4 <sup>20</sup> 20	8 <sup>15</sup> 15	15 <sup>8</sup> 8	0 <sup>24</sup> 24	29 <sup>50</sup> 50	20 <sup>29</sup> 29	19 <sup>13</sup> 13	S 26
M27	10 28 21	8 <sup>44</sup> 29	19 <sup>53</sup> 53	26 <sup>39</sup> 39	22 <sup>58</sup> 58	0 <sup>17</sup> 17	22 <sup>50</sup> 50	11 <sup>25</sup> 25	4 <sup>22</sup> 22	8 <sup>13</sup> 13	15 <sup>10</sup> 10	0 <sup>20</sup> 20	29 <sup>47</sup> 47	20 <sup>36</sup> 36	19 <sup>17</sup> 17	M27
T 28	10 32 18	9 <sup>44</sup> 38	1 <sup>42</sup> 42	27 <sup>42</sup> 42	24 <sup>5</sup> 5	0 <sup>15</sup> 15	22 <sup>52</sup> 52	11 <sup>23</sup> 23	4 <sup>24</sup> 24	8 <sup>11</sup> 11	15 <sup>11</sup> 11	0 <sup>18</sup> 18	29 <sup>43</sup> 43	20 <sup>42</sup> 42	19 <sup>21</sup> 21	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
W 1	17s 4	23s36	2s20	18s22	2s 2	3s31	0s45	18n21	1n33	16s59	1n 6	22n35	0s17	12n19	0s27	9n 4	0n53	21s38	1n 4	23s27	23s28	20s32	1s 2	4n 8			
T 2	16 47	24 13	1 19	17 48	2 0	3 0	0 42	18 30	1 33	17 1	1 6	22 35	0 17	12 19	0 27	9 4	0 53	21 38	1 4	23 27	23 28	20 33	1 1	4 8			
F 3	16 29	23 42	0 14	17 13	1 57	2 28	0 38	18 39	1 34	17 2	1 6	22 36	0 17	12 20	0 27	9 5	0 53	21 37	1 4	23 27	23 28	20 34	1 0	4 8			
S 4	16 12	22 0	0n53	16 36	1 55	1 57	0 35	18 47	1 34	17 4	1 6	22 36	0 17	12 20	0 27	9 6	0 53	21 37	1 4	23 27	23 28	20 36	0 59	4 7			
S 5	15 53	19 11	2 0	15 58	1 51	1 25	0 31	18 56	1 34	17 5	1 6	22 37	0 17	12 20	0 27	9 6	0 53	21 37	1 3	23 27	23 28	20 37	0 58	4 7			
M 6	15 35	15 20	3 1	15 18	1 47	0 54	0 28	19 4	1 34	17 6	1 7	22 37	0 17	12 21	0 27	9 7	0 54	21 37	1 3	23 27	23 28	20 38	0 56	4 7			
T 7	15 16	10 38	3 54	14 37	1 42	0 22	0 24	19 13	1 35	17 7	1 7	22 38	0 16	12 21	0 27	9 7	0 54	21 37	1 3	23 27	23 28	20 40	0 55	4 7			
W 8	14 57	5 20	4 34	13 55	1 37	0n 9	0 20	19 21	1 35	17 9	1 7	22 38	0 16	12 22	0 27	9 8	0 54	21 37	1 3	23 27	23 28	20 41	0 54	4 7			
T 9	14 38	0n18	4 59	13 11	1 31	0 41	0 16	19 30	1 35	17 10	1 7	22 39	0 16	12 22	0 27	9 9	0 54	21 37	1 3	23 27	23 28	20 42	0 53	4 7			
F 10	14 19	5 59	5 7	12 26	1 25	1 12	0 12	19 38	1 35	17 11	1 7	22 39	0 16	12 23	0 27	9 9	0 54	21 37	1 3	23 27	23 28	20 43	0 52	4 6			
S 11	13 59	11 24	4 56	11 40	1 17	1 44	0 8	19 46	1 35	17 12	1 7	22 40	0 16	12 24	0 27	9 10	0 54	21 37	1 3	23 27	23 28	20 44	0 51	4 6			
S 12	13 39	16 13	4 26	10 53	1 9	2 15	0 4	19 54	1 36	17 13	1 7	22 40	0 16	12 24	0 27	9 10	0 54	21 36	1 3	23 28	23 28	20 46	0 49	4 6			
M13	13 19	20 7	3 41	10 5	1 1	2 46	0 0	20 3	1 36	17 14	1 8	22 40	0 16	12 25	0 27	9 11	0 54	21 36	1 3	23 28	23 28	20 47	0 48	4 6			
T 14	12 59	22 48	2 42	9 17	0 52	3 18	0n 4	20 11	1 36	17 15	1 8	22 41	0 16	12 25	0 27	9 12	0 54	21 36	1 3	23 28	23 28	20 48	0 47	4 6			
W15	12 38	24 3	1 33	8 27	0 42	3 49	0 8	20 19	1 36	17 16	1 8	22 41	0 15	12 26	0 27	9 12	0 54	21 36	1 3	23 28	23 28	20 49	0 46	4 6			
T 16	12 18	23 47	0 20	7 38	0 31	4 20	0 12	20 27	1 36	17 17	1 8	22 41	0 15	12 27	0 27	9 13	0 54	21 36	1 3	23 28	23 28	20 51	0 45	4 6			
F 17	11 57	22 3	0s54	6 48	0 20	4 51	0 16	20 35	1 36	17 17	1 8	22 42	0 15	12 27	0 27	9 14	0 54	21 36	1 3	23 28	23 28	20 52	0 43	4 5			
S 18	11 36	19 1	2 4	5 59	0 8	5 22	0 21	20 42	1 36	17 18	1 8	22 42	0 15	12 28	0 27	9 14	0 54	21 36	1 3	23 28	23 28	20 53	0 42	4 5			
S 19	11 14	15 0	3 6	5 10	0n 5	5 53	0 25	20 50	1 36	17 19	1 8	22 42	0 15	12 29	0 27	9 15	0 54	21 36	1 2	23 28	23 28	20 54	0 41	4 5			
M20	10 53	10 16	3 57	4 21	0 18	6 24	0 30	20 58	1 37	17 20	1 9	22 43	0 15	12 29	0 27	9 15	0 54	21 36	1 2	23 28	23 28	20 55	0 39	4 5			
T 21	10 31	5 10	4 34	3 34	0 31	6 54	0 34	21 5	1 37	17 20	1 9	22 43	0 15	12 30	0 27	9 16	0 54	21 35	1 2	23 28	23 28	20 57	0 38	4 5			
W22	10 9	0s 4	4 56	2 48	0 45	7 24	0 39	21 13	1 37	17 21	1 9	22 43	0 15	12 31	0 27	9 17	0 54	21 35	1 2	23 28	23 28	20 58	0 37	4 5			
T 23	9 47	5 11	5 3	2 4	0 59	7 55	0 43	21 20	1 37	17 21	1 9	22 44	0 14	12 31	0 27	9 17	0 54	21 35	1 2	23 28	23 28	20 59	0 36	4 5			
F 24	9 25	9 59	4 55	1 22	1 14	8 25	0 48	21 28	1 37	17 22	1 9	22 44	0 14	12 32	0 27	9 18	0 54	21 35	1 2	23 28	23 28	21 0	0 34	4 5			
S 25	9 3	14 19	4 34	0 42	1 28	8 55	0 52	21 35	1 37	17 22	1 9	22 44	0 14	12 33	0 27	9 19	0 54	21 35	1 2	23 28	23 28	21 1	0 33	4 4			
S 26	8 41	18 0	4 1	0 6	1 43	9 24	0 57	21 42	1 37	17 23	1 9	22 45	0 14	12 34	0 27	9 19	0 54	21 35	1 2	23 28	23 28	21 2	0 32	4 4			
M27	8 18	20 54	3 18	0n28	1 57	9 54	1 2	21 49	1 37	17 23	1 10	22 45	0 14	12 34	0 27	9 20	0 54	21 35	1 2	23 28	23 28	21 4	0 30	4 4			
T 28	7s56	22s55	2s26	0n58	2n11	10n23	1n 6	21n56	1n37	17s23	1n10	22n45	0s14	12n35	0s27	9n21	0n54	21s35	1n 2	23s28	23s28	21s 5	0s29	4n 4			

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

MARCH 1769

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	10 36 14	10♈44'46	13♊33	27♋56	25♌12	1♍22	22♎53	11°R22	4♏26	8°R10	15♐12	0°D17	29♑40	20♒49	19♓24	W 1
T 2	10 40 11	11°44'52	25°32	28°21	26°19	1°55	22°55	11°21	4°29	8°1	15°14	0°R18	29°37	20°56	19°28	T 2
F 3	10 44 7	12°44'56	7♌43	28°37	27°25	2°28	22°56	11°20	4°31	8°6	15°15	0°18	29°34	21°2	19°32	F 3
S 4	10 48 4	13°44'58	20°11	28°R44	28°31	3°1	22°57	11°19	4°34	8°5	15°16	0°16	29°31	21°9	19°35	S 4
S 5	10 52 1	14°44'59	3♍2	28°42	29°37	3°34	22°58	11°18	4°36	8°3	15°17	0°12	29°28	21°16	19°39	S 5
M 6	10 55 57	15°44'58	16°17	28°30	0♍43	4°8	22°58	11°17	4°39	8°1	15°19	0°5	29°24	21°22	19°43	M 6
T 7	10 59 54	16°44'56	29°56	28°11	1°48	4°41	22°59	11°16	4°41	8°0	15°20	29♑56	29°21	21°29	19°47	T 7
W 8	11 3 50	17°44'51	13♋59	27°43	2°53	5°14	22°59	11°16	4°44	7°58	15°21	29°45	29°18	21°36	19°50	W 8
T 9	11 7 47	18°44'44	28°20	27°9	3°58	5°48	22°R59	11°15	4°46	7°56	15°22	29°32	29°15	21°43	19°54	T 9
F 10	11 11 43	19°44'36	12♌53	26°27	5°3	6°22	22°59	11°15	4°49	7°55	15°23	29°21	29°12	21°49	19°58	F 10
S 11	11 15 40	20°44'25	27°31	25°41	6°7	6°55	22°58	11°15	4°52	7°53	15°24	29°11	29°9	21°56	20°1	S 11
S 12	11 19 36	21°44'12	12♉6	24°50	7°11	7°29	22°58	11°15	4°54	7°51	15°25	29°4	29°5	22°3	20°5	S 12
M13	11 23 33	22°43'57	26°34	23°57	8°15	8°3	22°57	11°D14	4°57	7°50	15°26	29°0	29°2	22°9	20°9	M13
T 14	11 27 29	23°43'40	10♌49	23°1	9°19	8°37	22°56	11°15	5°0	7°48	15°27	28°58	28°59	22°16	20°13	T 14
W15	11 31 26	24°43'21	24°51	22°5	10°22	9°10	22°55	11°15	5°3	7°47	15°28	28°58	28°56	22°23	20°16	W15
T 16	11 35 23	25°42'59	8♌40	21°9	11°25	9°44	22°54	11°15	5°6	7°45	15°29	28°58	28°53	22°29	20°20	T 16
F 17	11 39 19	26°42'35	22°15	20°15	12°27	10°18	22°52	11°16	5°8	7°43	15°30	28°56	28°49	22°36	20°24	F 17
S 18	11 43 16	27°42'08	5♏39	19°24	13°29	10°53	22°51	11°16	5°11	7°42	15°31	28°53	28°46	22°43	20°27	S 18
S 19	11 47 12	28°41'39	18°51	18°37	14°31	11°27	22°49	11°17	5°14	7°40	15°32	28°47	28°43	22°49	20°31	S 19
M20	11 51 9	29°41'08	1♍53	17°54	15°32	12°1	22°47	11°17	5°17	7°39	15°33	28°37	28°40	22°56	20°35	M20
T 21	11 55 5	0♌40'35	14°43	17°15	16°33	12°35	22°44	11°18	5°20	7°37	15°34	28°25	28°37	23°3	20°39	T 21
W22	11 59 2	1°40'00	27°22	16°43	17°34	13°9	22°42	11°19	5°23	7°36	15°34	28°12	28°34	23°9	20°42	W22
T 23	12 2 58	2°39'22	9♌49	16°15	18°34	13°44	22°40	11°20	5°26	7°34	15°35	27°58	28°30	23°16	20°46	T 23
F 24	12 6 55	3°38'43	22°5	15°54	19°34	14°18	22°37	11°22	5°29	7°33	15°36	27°45	28°27	23°23	20°50	F 24
S 25	12 10 52	4°38'01	4♌10	15°38	20°33	14°53	22°34	11°23	5°32	7°31	15°37	27°34	28°24	23°29	20°53	S 25
S 26	12 14 48	5°37'18	16°7	15°28	21°32	15°27	22°31	11°24	5°35	7°30	15°37	27°25	28°21	23°36	20°57	S 26
M27	12 18 45	6°36'33	27°57	15°D24	22°31	16°2	22°27	11°26	5°38	7°29	15°38	27°19	28°18	23°43	21°0	M27
T 28	12 22 41	7°35'46	9♌45	15°26	23°29	16°36	22°24	11°28	5°42	7°27	15°39	27°16	28°15	23°49	21°4	T 28
W29	12 26 38	8°34'57	21°35	15°33	24°26	17°11	22°20	11°29	5°45	7°26	15°39	27°15	28°11	23°56	21°8	W29
T 30	12 30 34	9°34'06	3♌32	15°46	25°23	17°46	22°17	11°31	5°48	7°24	15°40	27°15	28°8	24°3	21°11	T 30
F 31	12 34 31	10°33'14	15♌41	16°3	26♌20	18♌20	22♌13	11°33	5°51	7°23	15°40	27°15	28°5	24°9	21°15	F 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
W 1	7s33	23s55	1s28	1n24	2n25	10n52	1n11	22n3	1n37	17s23	1n10	22n45	0s14	12n36
T 2	7 10	23 49	0 25	1 45	2 38	11 21	1 16	22 10	1 37	17 24	1 10	22 46	0 14	12 37
F 3	6 47	22 35	0n39	2 3	2 50	11 49	1 21	22 16	1 37	17 24	1 10	22 46	0 13	12 38
S 4	6 24	20 15	1 44	2 16	3 1	12 18	1 26	22 23	1 37	17 24	1 10	22 46	0 13	12 39
S 5	6 1	16 50	2 44	2 24	3 11	12 46	1 30	22 29	1 37	17 24	1 10	22 46	0 13	12 39
M 6	5 38	12 30	3 38	2 28	3 20	13 13	1 35	22 35	1 37	17 24	1 11	22 46	0 13	12 40
T 7	5 14	7 26	4 21	2 26	3 27	13 41	1 40	22 42	1 37	17 24	1 11	22 47	0 13	12 41
W 8	4 51	1 51	4 50	2 20	3 32	14 8	1 45	22 48	1 37	17 24	1 11	22 47	0 13	12 42
T 9	4 27	3n56	5 1	2 10	3 36	14 35	1 50	22 54	1 37	17 24	1 11	22 47	0 13	12 43
F 10	4 4	9 35	4 53	1 55	3 38	15 1	1 55	23 0	1 37	17 24	1 11	22 47	0 13	12 44
S 11	3 40	14 43	4 25	1 36	3 37	15 27	2 0	23 5	1 37	17 23	1 11	22 47	0 12	12 45
S 12	3 17	18 59	3 41	1 14	3 35	15 53	2 4	23 11	1 37	17 23	1 11	22 47	0 12	12 46
M13	2 53	22 2	2 42	0 49	3 31	16 19	2 9	23 16	1 37	17 23	1 12	22 47	0 12	12 47
T 14	2 30	23 39	1 34	0 22	3 25	16 44	2 14	23 22	1 37	17 22	1 12	22 48	0 12	12 48
W15	2 6	23 44	0 22	0s8	3 17	17 9	2 19	23 27	1 37	17 22	1 12	22 48	0 12	12 48
T 16	1 42	22 20	0s51	0 38	3 7	17 33	2 24	23 32	1 37	17 21	1 12	22 48	0 12	12 49
F 17	1 19	19 39	2 0	1 10	2 56	17 57	2 28	23 37	1 37	17 21	1 12	22 48	0 12	12 50
S 18	0 55	15 58	3 1	1 41	2 44	18 21	2 33	23 42	1 37	17 20	1 12	22 48	0 12	12 51
S 19	0 31	11 32	3 51	2 12	2 31	18 44	2 38	23 47	1 37	17 20	1 12	22 48	0 11	12 52
M20	0 8	6 38	4 28	2 41	2 17	19 6	2 43	23 51	1 37	17 19	1 13	22 48	0 11	12 53
T 21	0n16	1 33	4 51	3 10	2 2	19 29	2 47	23 56	1 37	17 19	1 13	22 48	0 11	12 54
W22	0 40	3s32	5 0	3 37	1 47	19 51	2 52	24 0	1 37	17 18	1 13	22 48	0 11	12 55
T 23	1 3	8 23	4 54	4 2	1 31	20 12	2 57	24 4	1 36	17 17	1 13	22 48	0 11	12 56
F 24	1 27	12 50	4 34	4 24	1 16	20 33	3 1	24 8	1 36	17 16	1 13	22 48	0 11	12 57
S 25	1 51	16 43	4 2	4 44	1 0	20 54	3 6	24 12	1 36	17 15	1 13	22 48	0 11	12 59
S 26	2 14	19 52	3 19	5 2	0 45	21 14	3 10	24 16	1 36	17 14	1 13	22 48	0 11	13 0
M27	2 38	22 8	2 29	5 18	0 30	21 34	3 15	24 20	1 36	17 14	1 13	22 48	0 10	13 1
T 28	3 1	23 27	1 31	5 31	0 15	21 53	3 19	24 23	1 36	17 13	1 13	22 48	0 10	13 2
W29	3 24	23 42	0 30	5 41	0 1	22 11	3 24	24 26	1 36	17 12	1 14	22 48	0 10	13 3
T 30	3 48	22 52	0n33	5 49	0s13	22 30	3 28	24 30	1 36	17 10	1 14	22 48	0 10	13 4
F 31	4n11	20s57	1n36	5s54	0s26	22n47	3n32	24n33	1n36	17s9	1n14	22n48	0s10	13n5

Julian Day Number = 2367233.5, Delta T = 20.98 sec  
Ecliptic obliquity = 23°28'10", Nutation = 0°00'18", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°31'03", Lahiri = 20°38'03"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

APRIL 1769

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 38 27	11°32'20	28°8	16°26	27°16	18°55	22°R 9	11°35	5°54	7°R22	15°41	27°R13	28°2	24°16	21°18	S 1
S 2	12 42 24	12°31'24	10°57	16°53	28°11	19°30	22°M 4	11°37	5°57	7°M20	15°41	27°10	27°59	24°23	21°22	S 2
M 3	12 46 21	13°30'26	24°14	17°24	29° 6	20° 5	22° 0	11°40	6° 1	7°19	15°42	27° 5	27°55	24°29	21°25	M 3
T 4	12 50 17	14°29'26	7°58	18° 0	0°II 0	20°40	21°55	11°42	6° 4	7°18	15°42	26°57	27°52	24°36	21°29	T 4
W 5	12 54 14	15°28'25	22°10	18°39	0°54	21°15	21°50	11°44	6° 7	7°17	15°42	26°47	27°49	24°43	21°32	W 5
T 6	12 58 10	16°27'21	6°46	19°23	1°47	21°50	21°46	11°47	6°11	7°15	15°43	26°36	27°46	24°49	21°36	T 6
F 7	13 2 7	17°26'16	21°39	20°10	2°39	22°25	21°40	11°50	6°14	7°14	15°43	26°26	27°43	24°56	21°39	F 7
S 8	13 6 3	18°25'08	6°39	21° 0	3°31	23° 0	21°35	11°52	6°17	7°13	15°43	26°17	27°40	25° 3	21°43	S 8
S 9	13 10 0	19°23'59	21°38	21°53	4°22	23°35	21°30	11°55	6°21	7°12	15°44	26°10	27°36	25° 9	21°46	S 9
M10	13 13 56	20°22'47	6°II7	22°50	5°12	24°10	21°24	11°58	6°24	7°11	15°44	26° 7	27°33	25°16	21°50	M10
T 11	13 17 53	21°21'34	21° 0	23°49	6° 1	24°46	21°19	12° 1	6°27	7°10	15°44	26°D 5	27°30	25°23	21°53	T 11
W12	13 21 50	22°20'18	5°513	24°51	6°50	25°21	21°13	12° 5	6°31	7° 9	15°44	26° 5	27°27	25°29	21°56	W12
T 13	13 25 46	23°18'59	19° 6	25°56	7°38	25°56	21° 7	12° 8	6°34	7° 7	15°44	26°R 6	27°24	25°36	21°59	T 13
F 14	13 29 43	24°17'39	2°L38	27° 3	8°25	26°31	21° 1	12°11	6°37	7° 6	15°44	26° 6	27°21	25°43	22° 3	F 14
S 15	13 33 39	25°16'16	15°53	28°13	9°11	27° 7	20°55	12°15	6°41	7° 5	15°44	26° 4	27°17	25°49	22° 6	S 15
S 16	13 37 36	26°14'50	28°51	29°25	9°56	27°42	20°49	12°18	6°44	7° 4	15°44	25°59	27°14	25°56	22° 9	S 16
M17	13 41 32	27°13'23	11°M36	0°Y40	10°40	28°17	20°42	12°22	6°48	7° 3	15°R44	25°53	27°11	26° 3	22°12	M17
T 18	13 45 29	28°11'53	24° 9	1°56	11°23	28°53	20°36	12°26	6°51	7° 3	15°44	25°44	27° 8	26° 9	22°16	T 18
W19	13 49 25	29°10'22	6°L31	3°15	12° 5	29°28	20°29	12°30	6°55	7° 2	15°44	25°34	27° 5	26°16	22°19	W19
T 20	13 53 22	0°8'8'48	18°44	4°36	12°46	0°54	20°23	12°34	6°58	7° 1	15°44	25°23	27° 1	26°23	22°22	T 20
F 21	13 57 19	1° 7'13	0°M48	5°59	13°26	0°39	20°16	12°38	7° 1	7° 0	15°44	25°13	26°58	26°29	22°25	F 21
S 22	14 1 15	2° 5'35	12°46	7°24	14° 5	1°15	20° 9	12°42	7° 5	6°59	15°44	25° 5	26°55	26°36	22°28	S 22
S 23	14 5 12	3° 3'56	24°37	8°50	14°43	1°50	20° 2	12°46	7° 8	6°58	15°44	24°58	26°52	26°43	22°31	S 23
M24	14 9 8	4° 2'16	6°26	10°19	15°19	2°26	19°55	12°50	7°12	6°58	15°44	24°54	26°49	26°49	22°34	M24
T 25	14 13 5	5° 0'33	18°14	11°50	15°54	3° 2	19°48	12°54	7°15	6°57	15°43	24°52	26°46	26°56	22°37	T 25
W26	14 17 1	5°58'49	0°34	13°23	16°28	3°37	19°41	12°59	7°19	6°56	15°43	24°D52	26°42	27° 3	22°40	W26
T 27	14 20 58	6°57'03	12° 2	14°57	17° 0	4°13	19°34	13° 3	7°22	6°56	15°43	24°53	26°39	27° 9	22°43	T 27
F 28	14 24 54	7°55'16	24°11	16°33	17°31	4°49	19°26	13° 8	7°26	6°55	15°43	24°54	26°36	27°16	22°46	F 28
S 29	14 28 51	8°53'27	6°36	18°12	18° 0	5°24	19°19	13°13	7°29	6°54	15°42	24°R55	26°33	27°23	22°49	S 29
S 30	14 32 48	9°51'37	19°23	19°52	18°II28	6°50	19°M12	13°518	7°333	6°M54	15°42	24°55	26°30	27°M29	22°51	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	4n34	18s 1	2n36	5s57	0s39	23n 5	3n36	24n36	1n36	17s 8	1n14	22n48	0s10	13n 6	0s26	9n39	0n54	21s34	1n 0	23s26	23s27	21s38	0n16	4n 3			
S 2	4 57	14 8	3 30	5 58	0 51	23 21	3 40	24 38	1 35	17 7	1 14	22 48	0 10	13 7	0 26	9 40	0 54	21 34	1 0	23 26	23 27	21 39	0 17	4 3			
M 3	5 20	9 27	4 15	5 56	1 2	23 38	3 44	24 41	1 35	17 6	1 14	22 48	0 10	13 8	0 26	9 40	0 54	21 34	1 0	23 26	23 27	21 40	0 19	4 3			
T 4	5 43	4 10	4 46	5 52	1 13	23 53	3 48	24 43	1 35	17 5	1 14	22 48	0 10	13 9	0 26	9 41	0 54	21 34	0 59	23 26	23 27	21 41	0 20	4 3			
W 5	6 6	1n30	5 1	5 46	1 23	24 9	3 52	24 46	1 35	17 3	1 14	22 48	0 9	13 10	0 26	9 41	0 54	21 34	0 59	23 26	23 27	21 42	0 22	4 3			
T 6	6 29	7 14	4 58	5 38	1 33	24 23	3 56	24 48	1 35	17 2	1 14	22 47	0 9	13 11	0 26	9 41	0 54	21 34	0 59	23 26	23 27	21 43	0 23	4 3			
F 7	6 51	12 41	4 34	5 28	1 42	24 37	3 59	24 50	1 35	17 1	1 14	22 47	0 9	13 13	0 26	9 42	0 54	21 34	0 59	23 25	23 27	21 44	0 24	4 3			
S 8	7 14	17 23	3 51	5 16	1 50	24 51	4 3	24 51	1 35	16 59	1 14	22 47	0 9	13 14	0 26	9 42	0 54	21 34	0 59	23 25	23 27	21 45	0 26	4 3			
S 9	7 36	20 58	2 53	5 2	1 58	25 4	4 6	24 53	1 34	16 58	1 15	22 47	0 9	13 15	0 26	9 43	0 54	21 34	0 59	23 25	23 27	21 46	0 27	4 3			
M10	7 58	23 6	1 43	4 46	2 5	25 17	4 9	24 55	1 34	16 56	1 15	22 47	0 9	13 16	0 26	9 43	0 54	21 34	0 59	23 25	23 27	21 47	0 29	4 3			
T 11	8 20	23 37	0 27	4 29	2 12	25 29	4 13	24 56	1 34	16 55	1 15	22 47	0 9	13 17	0 26	9 44	0 54	21 34	0 59	23 25	23 27	21 47	0 30	4 3			
W12	8 42	22 33	0s49	4 10	2 18	25 41	4 16	24 57	1 34	16 53	1 15	22 47	0 9	13 18	0 26	9 44	0 54	21 34	0 59	23 25	23 27	21 48	0 31	4 3			
T 13	9 4	20 8	2 0	3 49	2 23	25 52	4 19	24 58	1 34	16 52	1 15	22 46	0 9	13 19	0 26	9 44	0 54	21 34	0 59	23 25	23 27	21 49	0 33	4 3			
F 14	9 26	16 38	3 2	3 26	2 28	26 2	4 21	24 59	1 34	16 50	1 15	22 46	0 8	13 20	0 26	9 45	0 54	21 34	0 59	23 25	23 27	21 50	0 34	4 3			
S 15	9 47	12 23	3 53	3 2	2 32	26 12	4 24	25 0	1 33	16 48	1 15	22 46	0 8	13 21	0 26	9 45	0 54	21 34	0 59	23 25	23 26	21 51	0 35	4 3			
S 16	10 9	7 38	4 32	2 37	2 36	26 21	4 26	25 0	1 33	16 47	1 15	22 46	0 8	13 23	0 26	9 45	0 54	21 34	0 59	23 25	23 26	21 52	0 37	4 3			
M17	10 30	2 40	4 55	2 10	2 39	26 30	4 29	25 1	1 33	16 45	1 15	22 46	0 8	13 24	0 26	9 46	0 54	21 34	0 59	23 24	23 26	21 53	0 38	4 3			
T 18	10 51	2s20	5 5	1 42	2 41	26 39	4 31	25 1	1 33	16 43	1 15	22 45	0 8	13 25	0 26	9 46	0 54	21 34	0 59	23 24	23 26	21 54	0 39	4 3			
W19	11 12	7 10	4 59	1 12	2 43	26 47	4 33	25 1	1 33	16 41	1 15	22 45	0 8	13 26	0 26	9 46	0 54	21 34	0 58	23 24	23 26	21 54	0 41	4 4			
T 20	11 32	11 40	4 40	0 41	2 44	26 54	4 35	25 1	1 33	16 40	1 15	22 45	0 8	13 27	0 26	9 47	0 54	21 34	0 58	23 23	23 26	21 55	0 42	4 4			
F 21	11 53	15 39	4 9	0 9	2 45	27 1	4 36	25 0	1 32	16 38	1 15	22 45	0 8	13 28	0 26	9 47	0 54	21 34	0 58	23 23	23 26	21 56	0 43	4 4			
S 22	12 13	18 58	3 26	0n25	2 45	27 7	4 38	25 0	1 32	16 36	1 15	22 44	0 8	13 29	0 26	9 47	0 54	21 35	0 58	23 23	23 26	21 57	0 44	4 4			
S 23	12 33	21 28	2 35	0 59	2 45	27 13	4 39	24 59	1 32	16 34	1 15	22 44	0 7	13 31	0 26	9 48	0 54	21 35	0 58	23 22	23 26	21 58	0 46	4 4			
M24	12 53	23 1	1 38	1 35	2 44	27 18	4 40	24 59	1 32	16 32	1 15	22 44	0 7	13 32	0 26	9 48	0 54	21 35	0 58	23 22	23 26	21 59	0 47	4 4			
T 25	13 12	23 32	0 36	2 12	2 42	27 23	4 41	24 58	1 32	16 30	1 15	22 43	0 7	13 33	0 26	9 48	0 54	21 35	0 58	23 22	23 26	21 59	0 48	4 4			
W26	13 32	23 0	0n28	2 50	2 40	27 27	4 42	24 57	1 31	16 28	1 15	22 43	0 7	13 34	0 26	9 48	0 54	21 35	0 58	23 22	23 26	22 0	0 49	4 4			
T 27	13 51	21 24	1 32	3 29	2 37	27 30	4 42	24 55	1 31	16 26	1 15	22 43	0 7	13 35	0 26	9 49	0 54	21 35	0 58	23 22	23 26	22 1	0 51	4 4			
F 28	14 10	18 49	2 32	4 9	2 34	27 34	4 42	24 54	1 31	16 25	1 15	22 42	0 7	13 36	0 26	9 49	0 54	21 35	0 58	23 22	23 26	22 2	0 52	4 4			
S 29	14 29	15 19	3 27	4 49	2 31	27 36	4 42	24 52	1 31	16 23	1 15	22 42	0 7	13 37	0 26	9 49	0 54	21 35	0 58	23 22	23 25	22 3	0 53	4 4			
S 30	14n47	11s 2	4n13	5n31	2s26	27n38	4n41	24n51	1n31	16s21	1n15	22n42	0s 7	13n39	0s26	9n49	0n54	21s35	0n58	23s22	23s25	22s 3	0n54	4n 5			

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

MAY 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 36 44	10♌49'46	2♊35	21♊34	18♊54	6♊36	19♊R 4	13♊22	7♊36	6♊R53	15♊R41	24♊R53	26♊R26	27♊R36	22♊R54	M 1
T 2	14 40 41	11°47'52	16°15	23°18	19°19	7°12	18♊57	13°27	7°39	6♊53	15♊R41	24♊R49	26°23	27°43	22°57	T 2
W 3	14 44 37	12°45'58	0♊24	25° 3	19°42	7°47	18°49	13°32	7°43	6°52	15°41	24°43	26°20	27°49	22°59	W 3
T 4	14 48 34	13°44'02	14°59	26°51	20° 3	8°23	18°41	13°37	7°46	6°52	15°40	24°37	26°17	27°56	23° 2	T 4
F 5	14 52 30	14°42'04	29°56	28°40	20°22	8°59	18°34	13°43	7°50	6°51	15°40	24°31	26°14	28° 3	23° 5	F 5
S 6	14 56 27	15°40'05	15♌ 5	0♊32	20°39	9°35	18°26	13°48	7°53	6°51	15°39	24°26	26°11	28° 9	23° 7	S 6
S 7	15 0 23	16°38'05	0♊18	2°25	20°55	10°11	18°19	13°53	7°57	6°50	15°38	24°22	26° 7	28°16	23°10	S 7
M 8	15 4 20	17°36'03	15°23	4°20	21° 8	10°47	18°11	13°59	8° 0	6°50	15°38	24°21	26° 4	28°23	23°12	M 8
T 9	15 8 17	18°33'59	0♊13	6°17	21°19	11°23	18° 3	14° 4	8° 4	6°50	15°37	24°D20	26° 1	28°29	23°15	T 9
W10	15 12 13	19°31'54	14°41	8°16	21°28	11°59	17°56	14°10	8° 7	6°50	15°37	24°21	25°58	28°36	23°17	W10
T 11	15 16 10	20°29'46	28°46	10°16	21°35	12°35	17°48	14°15	8°10	6°49	15°36	24°23	25°55	28°43	23°20	T 11
F 12	15 20 6	21°27'37	12♌25	12°19	21°40	13°11	17°40	14°21	8°14	6°49	15°35	24°24	25°52	28°49	23°22	F 12
S 13	15 24 3	22°25'26	25°41	14°23	21°R42	13°47	17°33	14°27	8°17	6°49	15°35	24°R24	25°48	28°56	23°24	S 13
S 14	15 27 59	23°23'13	8♊36	16°28	21°42	14°23	17°25	14°32	8°21	6°49	15°34	24°23	25°45	29° 3	23°26	S 14
M15	15 31 56	24°20'59	21°14	18°35	21°40	14°59	17°18	14°38	8°24	6°49	15°33	24°21	25°42	29° 9	23°29	M15
T 16	15 35 52	25°18'43	3♌36	20°43	21°35	15°35	17°10	14°44	8°27	6°49	15°32	24°17	25°39	29°16	23°31	T 16
W17	15 39 49	26°16'25	15°47	22°53	21°28	16°11	17° 3	14°50	8°31	6°49	15°31	24°13	25°36	29°22	23°33	W17
T 18	15 43 45	27°14'06	27°49	25° 3	21°18	16°48	16°55	14°56	8°34	6°D49	15°31	24° 8	25°32	29°29	23°35	T 18
F 19	15 47 42	28°11'45	9♊45	27°14	21° 6	17°24	16°48	15° 2	8°37	6°49	15°30	24° 4	25°29	29°36	23°37	F 19
S 20	15 51 39	29° 9'24	21°36	29°25	20°51	18° 0	16°40	15° 8	8°41	6°49	15°29	24° 0	25°26	29°42	23°39	S 20
S 21	15 55 35	0♊ 7'00	3♌25	1♊37	20°34	18°36	16°33	15°15	8°44	6°49	15°28	23°58	25°23	29°49	23°41	S 21
M22	15 59 32	1° 4'36	15°13	3°49	20°15	19°12	16°26	15°21	8°47	6°49	15°27	23°56	25°20	29°56	23°43	M22
T 23	16 3 28	2° 2'10	27° 4	6° 0	19°53	19°49	16°19	15°27	8°50	6°49	15°26	23°D56	25°17	0♌ 2	23°45	T 23
W24	16 7 25	2°59'44	8♊59	8°11	19°29	20°25	16°12	15°34	8°54	6°49	15°25	23°57	25°13	0° 9	23°46	W24
T 25	16 11 21	3°57'16	21° 2	10°21	19° 4	21° 1	16° 5	15°40	8°57	6°50	15°24	23°58	25°10	0°16	23°48	T 25
F 26	16 15 18	4°54'48	3♌16	12°30	18°36	21°38	15°58	15°47	9° 0	6°50	15°23	24° 0	25° 7	0°22	23°50	F 26
S 27	16 19 15	5°52'18	15°45	14°37	18° 6	22°14	15°51	15°53	9° 3	6°50	15°22	24° 1	25° 4	0°29	23°51	S 27
S 28	16 23 11	6°49'48	28°32	16°43	17°35	22°50	15°44	16° 0	9° 6	6°50	15°21	24° 2	25° 1	0°36	23°53	S 28
M29	16 27 8	7°47'17	11♌41	18°47	17° 2	23°27	15°38	16° 6	9°10	6°51	15°20	24°R 2	24°58	0°42	23°55	M29
T 30	16 31 4	8°44'45	25°14	20°49	16°28	24° 3	15°31	16°13	9°13	6°51	15°19	24° 1	24°54	0°49	23°56	T 30
W31	16 35 1	9♊42'12	9♊13	22♊49	15♊52	24♊39	15♊25	16♊20	9♌16	6♊52	15♊18	24♌ 0	24♌51	0♌56	23♌58	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
M 1	15n 6	6s 6	4n47	6n14	2s21	27n40	4n41	24n49	1n30	16s19	1n15	22n41	0s 7	13n40	0s26	9n49
T 2	15 24	0 43	5 6	6 57	2 16	27 41	4 39	24 46	1 30	16 17	1 15	22 41	0 6	13 41	0 26	9 50
W 3	15 41	4n52	5 8	7 41	2 10	27 41	4 38	24 44	1 30	16 15	1 15	22 40	0 6	13 42	0 26	9 50
T 4	15 59	10 23	4 51	8 26	2 4	27 41	4 36	24 42	1 30	16 13	1 15	22 40	0 6	13 43	0 26	9 50
F 5	16 16	15 24	4 13	9 11	1 57	27 41	4 34	24 39	1 30	16 11	1 15	22 40	0 6	13 44	0 26	9 50
S 6	16 33	19 31	3 17	9 57	1 50	27 40	4 32	24 36	1 29	16 9	1 15	22 39	0 6	13 45	0 26	9 50
S 7	16 50	22 19	2 7	10 43	1 42	27 38	4 29	24 34	1 29	16 6	1 15	22 39	0 6	13 46	0 26	9 50
M 8	17 6	23 28	0 49	11 30	1 34	27 36	4 26	24 30	1 29	16 4	1 14	22 38	0 6	13 47	0 26	9 50
T 9	17 22	22 56	0s32	12 17	1 26	27 33	4 22	24 27	1 29	16 2	1 14	22 38	0 6	13 49	0 26	9 50
W10	17 38	20 51	1 49	13 4	1 17	27 30	4 18	24 24	1 28	16 0	1 14	22 37	0 6	13 50	0 26	9 50
T 11	17 54	17 33	2 57	13 51	1 8	27 26	4 14	24 20	1 28	15 58	1 14	22 37	0 6	13 51	0 25	9 51
F 12	18 9	13 22	3 53	14 38	0 58	27 21	4 9	24 16	1 28	15 56	1 14	22 36	0 5	13 52	0 25	9 51
S 13	18 24	8 40	4 35	15 24	0 48	27 16	4 4	24 13	1 28	15 54	1 14	22 36	0 5	13 53	0 25	9 51
S 14	18 39	3 42	5 1	16 11	0 38	27 10	3 58	24 8	1 28	15 52	1 14	22 35	0 5	13 54	0 25	9 51
M15	18 53	1s18	5 13	16 56	0 28	27 4	3 52	24 4	1 27	15 50	1 14	22 35	0 5	13 55	0 25	9 51
T 16	19 7	6 9	5 9	17 41	0 17	26 57	3 48	24 0	1 27	15 48	1 14	22 34	0 5	13 56	0 25	9 51
W17	19 21	10 42	4 51	18 25	0 6	26 49	3 45	23 55	1 27	15 46	1 14	22 34	0 5	13 57	0 25	9 51
T 18	19 34	14 46	4 21	19 7	0n 4	26 41	3 30	23 51	1 27	15 44	1 13	22 33	0 5	13 58	0 25	9 51
F 19	19 47	18 13	3 39	19 48	0 15	26 32	3 22	23 46	1 26	15 42	1 13	22 32	0 5	13 59	0 25	9 51
S 20	20 0	20 54	2 49	20 28	0 25	26 22	3 13	23 41	1 26	15 40	1 13	22 32	0 5	14 1	0 25	9 51
S 21	20 12	22 40	1 51	21 5	0 35	26 11	3 4	23 36	1 26	15 38	1 13	22 31	0 5	14 2	0 25	9 51
M22	20 24	23 26	0 48	21 41	0 45	26 0	2 54	23 30	1 26	15 36	1 13	22 31	0 5	14 3	0 25	9 51
T 23	20 36	23 9	0n17	22 14	0 55	25 48	2 44	23 25	1 25	15 35	1 13	22 30	0 4	14 4	0 25	9 50
W24	20 47	21 48	1 22	22 45	1 4	25 35	2 33	23 19	1 25	15 33	1 13	22 29	0 4	14 5	0 25	9 50
T 25	20 58	19 27	2 24	23 14	1 13	25 22	2 21	23 13	1 25	15 31	1 12	22 29	0 4	14 6	0 25	9 50
F 26	21 9	16 12	3 21	23 39	1 21	25 8	2 10	23 7	1 25	15 29	1 12	22 28	0 4	14 7	0 25	9 50
S 27	21 19	12 10	4 9	24 3	1 28	24 53	1 58	23 1	1 24	15 27	1 12	22 27	0 4	14 8	0 25	9 50
S 28	21 29	7 32	4 46	24 23	1 35	24 38	1 45	22 55	1 24	15 25	1 12	22 27	0 4	14 9	0 25	9 50
M29	21 38	2 25	5 9	24 41	1 42	24 22	1 32	22 48	1 24	15 24	1 12	22 26	0 4	14 10	0 25	9 50
T 30	21 47	2n57	5 17	24 56	1 47	24 5	1 19	22 42	1 23	15 22	1 12	22 25	0 4	14 11	0 26	9 50
W31	21n56	8n20	5n 6	25n 8	1n52	23n48	1n 5	22n35	1n23	15s20	1n11	22n24	0s 4	14n12	0s26	9n49

Julian Day Number = 2367294.5, Delta T = 21.01 sec  
Ecliptic obliquity = 23°28'09, Nutation = 0°00'16, out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 21°31'11, Lahiri = 20°38'12Greg. Calendar



# ASTRODIENST EPHEMERIS for the year 1769

## geocentric

JUNE 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 38 57	10 <sup>II</sup> 39'39	23 <sup>V</sup> 38	24 <sup>II</sup> 47	15°R16	25 <sup>☾</sup> 16	15°R18	16 <sup>☾</sup> 27	9 <sup>♂</sup> 19	6 <sup>♂</sup> 52	15°R16	23°R59	24 <sup>♂</sup> 48	1 <sup>♂</sup> 2	23 <sup>♂</sup> 59	T 1
F 2	16 42 54	11°37'05	8 <sup>♂</sup> 24	26°42	14 <sup>II</sup> 39	25°52	15 <sup>♂</sup> 12	16°34	9°22	6°52	15 <sup>♂</sup> 15	23 <sup>♂</sup> 57	24°45	1°9	24°0	F 2
S 3	16 46 50	12°34'31	23°26	28°36	14°2	26°29	15°6	16°40	9°25	6°53	15°14	23°56	24°42	1°16	24°2	S 3
S 4	16 50 47	13°31'55	8 <sup>II</sup> 36	0 <sup>☾</sup> 26	13°24	27°5	15°0	16°47	9°28	6°54	15°13	23°55	24°38	1°22	24°3	S 4
M 5	16 54 44	14°29'19	23°44	2°14	12°47	27°42	14°54	16°54	9°31	6°54	15°12	23°D55	24°35	1°29	24°4	M 5
T 6	16 58 40	15°26'43	8 <sup>☾</sup> 42	4°0	12°9	28°18	14°48	17°1	9°34	6°55	15°10	23°55	24°32	1°36	24°5	T 6
W 7	17 2 37	16°24'05	23°21	5°43	11°33	28°55	14°43	17°8	9°37	6°55	15°9	23°56	24°29	1°42	24°6	W 7
T 8	17 6 33	17°21'26	7 <sup>♂</sup> 26	7°24	10°57	29°31	14°37	17°16	9°40	6°56	15°8	23°56	24°26	1°49	24°7	T 8
F 9	17 10 30	18°18'46	21°25	9°2	10°21	0 <sup>♂</sup> 8	14°32	17°23	9°43	6°57	15°7	23°57	24°23	1°56	24°8	F 9
S 10	17 14 26	19°16'05	4 <sup>♂</sup> 48	10°37	9°47	0°45	14°27	17°30	9°46	6°57	15°5	23°57	24°19	2°2	24°9	S 10
S 11	17 18 23	20°13'23	17°46	12°10	9°15	1°21	14°22	17°37	9°48	6°58	15°4	23°R57	24°16	2°9	24°10	S 11
M12	17 22 19	21°10'41	0 <sup>♂</sup> 23	13°40	8°44	1°58	14°17	17°44	9°51	6°59	15°3	23°57	24°13	2°16	24°11	M12
T 13	17 26 16	22°7'57	12°42	15°7	8°14	2°35	14°12	17°52	9°54	7°0	15°2	23°57	24°10	2°22	24°12	T 13
W14	17 30 13	23°5'13	24°48	16°32	7°47	3°11	14°7	17°59	9°57	7°1	15°0	23°57	24°7	2°29	24°12	W14
T 15	17 34 9	24°2'27	6 <sup>♂</sup> 45	17°53	7°21	3°48	14°3	18°6	9°59	7°2	14°59	23°D57	24°4	2°36	24°13	T 15
F 16	17 38 6	24°59'42	18°35	19°13	6°58	4°25	13°59	18°14	10°2	7°2	14°57	23°57	24°0	2°42	24°14	F 16
S 17	17 42 2	25°56'55	0 <sup>♂</sup> 24	20°29	6°36	5°1	13°54	18°21	10°5	7°3	14°56	23°57	23°57	2°49	24°14	S 17
S 18	17 45 59	26°54'08	12°12	21°42	6°17	5°38	13°50	18°28	10°7	7°4	14°55	23°57	23°54	2°56	24°15	S 18
M19	17 49 55	27°51'21	24°4	22°53	6°1	6°15	13°47	18°36	10°10	7°5	14°53	23°R57	23°51	3°2	24°15	M19
T 20	17 53 52	28°48'33	6 <sup>♂</sup> 2	24°0	5°46	6°52	13°43	18°43	10°12	7°6	14°52	23°57	23°48	3°9	24°16	T 20
W21	17 57 48	29°45'45	18°7	25°4	5°35	7°28	13°39	18°51	10°15	7°8	14°51	23°57	23°44	3°16	24°16	W21
T 22	18 1 45	0 <sup>☾</sup> 42'57	0 <sup>♂</sup> 21	26°6	5°25	8°5	13°36	18°58	10°18	7°9	14°49	23°56	23°41	3°22	24°16	T 22
F 23	18 5 42	1°40'08	12°47	27°4	5°18	8°42	13°33	19°6	10°20	7°10	14°48	23°55	23°38	3°29	24°17	F 23
S 24	18 9 38	2°37'20	25°26	27°58	5°13	9°19	13°30	19°13	10°22	7°11	14°46	23°54	23°35	3°35	24°17	S 24
S 25	18 13 35	3°34'31	8 <sup>♂</sup> 20	28°49	5°D11	9°56	13°27	19°21	10°25	7°12	14°45	23°53	23°32	3°42	24°17	S 25
M26	18 17 31	4°31'42	21°32	29°37	5°11	10°33	13°25	19°29	10°27	7°13	14°43	23°52	23°29	3°49	24°17	M26
T 27	18 21 28	5°28'54	5 <sup>♂</sup> 3	0 <sup>♂</sup> 21	5°13	11°10	13°22	19°36	10°29	7°14	14°42	23°D52	23°25	3°55	24°R17	T 27
W28	18 25 24	6°26'06	18°54	1°1	5°18	11°47	13°20	19°44	10°32	7°16	14°40	23°52	23°22	4°2	24°17	W28
T 29	18 29 21	7°23'18	3 <sup>♂</sup> 5	1°38	5°25	12°24	13°18	19°51	10°34	7°17	14°39	23°53	23°19	4°9	24°17	T 29
F 30	18 33 17	8 <sup>☾</sup> 20'30	17 <sup>♂</sup> 35	2 <sup>♂</sup> 10	5 <sup>II</sup> 34	13 <sup>♂</sup> 1	13 <sup>♂</sup> 16	19 <sup>☾</sup> 59	10 <sup>♂</sup> 36	7 <sup>♂</sup> 18	14 <sup>♂</sup> 38	23 <sup>♂</sup> 54	23 <sup>♂</sup> 16	4 <sup>♂</sup> 15	24 <sup>♂</sup> 17	F 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	
T 1	22n 4	13n27	4n35	25n18	1n56	23n30	0n51	22n28	1n23	15s19	1n11	22n24	0s 4	14n13	0s26	9n49	0n53	21s41	0n55	23s20	23s22	22s26	1n25	4n 9
F 2	22 12	17 54	3 46	25 25	2 0	23 12	0 37	22 21	1 23	15 17	1 11	22 23	0 3	14 14	0 26	9 49	0 53	21 41	0 55	23 20	23 22	22 26	1 26	4 9
S 3	22 20	21 15	2 41	25 30	2 2	22 54	0 23	22 14	1 22	15 15	1 11	22 22	0 3	14 15	0 26	9 49	0 53	21 41	0 55	23 20	23 22	22 27	1 26	4 9
S 4	22 27	23 9	1 24	25 32	2 4	22 35	0 9	22 7	1 22	15 14	1 11	22 21	0 3	14 16	0 26	9 49	0 53	21 41	0 55	23 20	23 22	22 27	1 27	4 9
M 5	22 34	23 20	0 1	25 32	2 5	22 16	0s 5	21 59	1 22	15 12	1 10	22 21	0 3	14 17	0 26	9 48	0 53	21 41	0 55	23 20	23 21	22 28	1 28	4 10
T 6	22 40	21 50	1s21	25 30	2 5	21 58	0 19	21 51	1 22	15 11	1 10	22 20	0 3	14 17	0 26	9 48	0 53	21 42	0 55	23 20	23 21	22 28	1 28	4 10
W 7	22 46	18 53	2 36	25 26	2 5	21 39	0 33	21 44	1 21	15 9	1 10	22 19	0 3	14 18	0 26	9 48	0 53	21 42	0 55	23 20	23 21	22 29	1 29	4 10
T 8	22 52	14 51	3 40	25 19	2 4	21 20	0 47	21 36	1 21	15 8	1 10	22 18	0 3	14 19	0 26	9 48	0 53	21 42	0 55	23 20	23 21	22 30	1 29	4 10
F 9	22 57	10 9	4 28	25 11	2 2	21 2	1 1	21 28	1 21	15 7	1 10	22 17	0 3	14 20	0 26	9 47	0 53	21 42	0 55	23 20	23 21	22 30	1 30	4 10
S 10	23 2	5 6	5 0	25 2	1 59	20 43	1 14	21 19	1 20	15 5	1 9	22 17	0 3	14 21	0 26	9 47	0 53	21 43	0 55	23 20	23 21	22 31	1 30	4 10
S 11	23 6	0s 0	5 16	24 50	1 56	20 25	1 27	21 11	1 20	15 4	1 9	22 16	0 3	14 22	0 26	9 47	0 53	21 43	0 54	23 20	23 21	22 31	1 31	4 11
M12	23 10	4 59	5 16	24 37	1 52	20 8	1 40	21 3	1 20	15 3	1 9	22 15	0 3	14 23	0 26	9 46	0 53	21 43	0 54	23 20	23 21	22 32	1 31	4 11
T 13	23 14	9 38	5 1	24 23	1 47	19 51	1 53	20 54	1 20	15 2	1 9	22 14	0 2	14 24	0 26	9 46	0 53	21 43	0 54	23 20	23 20	22 32	1 32	4 11
W14	23 17	13 51	4 33	24 8	1 42	19 35	2 5	20 45	1 19	15 0	1 8	22 13	0 2	14 25	0 26	9 46	0 53	21 44	0 54	23 20	23 20	22 33	1 32	4 11
T 15	23 20	17 27	3 53	23 51	1 36	19 20	2 16	20 36	1 19	14 59	1 8	22 12	0 2	14 25	0 26	9 45	0 53	21 44	0 54	23 20	23 20	22 33	1 33	4 11
F 16	23 22	20 20	3 4	23 33	1 29	19 5	2 27	20 27	1 19	14 58	1 8	22 11	0 2	14 26	0 26	9 45	0 53	21 44	0 54	23 20	23 20	22 34	1 33	4 11
S 17	23 24	22 20	2 7	23 15	1 21	18 51	2 38	20 18	1 18	14 57	1 8	22 11	0 2	14 27	0 26	9 45	0 53	21 44	0 54	23 20	23 20	22 34	1 33	4 12
S 18	23 26	23 21	1 5	22 55	1 13	18 38	2 48	20 9	1 18	14 56	1 7	22 10	0 2	14 28	0 26	9 44	0 53	21 44	0 54	23 20	23 20	22 35	1 34	4 12
M19	23 27	23 19	0n 1	22 35	1 5	18 25	2 58	19 59	1 18	14 55	1 7	22 9	0 2	14 29	0 26	9 44	0 53	21 45	0 54	23 20	23 20	22 35	1 34	4 12
T 20	23 28	22 13	1 7	22 15	0 55	18 14	3 7	19 50	1 17	14 55	1 7	22 8	0 2	14 30	0 26	9 44	0 53	21 45	0 54	23 20	23 19	22 36	1 35	4 12
W21	23 28	20 5	2 10	21 53	0 46	18 3	3 15	19 40	1 17	14 54	1 7	22 7	0 2	14 30	0 26	9 43	0 53	21 45	0 54	23 20	23 19	22 36	1 35	4 12
T 22	23 28	17 2	3 9	21 32	0 35	17 53	3 24	19 30	1 17	14 53	1 7	22 6	0 2	14 31	0 26	9 43	0 53	21 45	0 54	23 20	23 19	22 37	1 35	4 12
F 23	23 28	13 10	3 59	21 10	0 24	17 45	3 31	19 20	1 17	14 52	1 6	22 5	0 2	14 32	0 26	9 42	0 53	21 46	0 53	23 20	23 19	22 37	1 35	4 13
S 24	23 27	8 41	4 39	20 48	0 13	17 37	3 38	19 10	1 16	14 52	1 6	22 4	0 1	14 33	0 26	9 42	0 52	21 46	0 53	23 20	23 19	22 38	1 36	4 13
S 25	23 25	3 44	5 5	20 26	0 1	17 30	3 45	19 0	1 16	14 51	1 6	22 3	0 1	14 33	0 26	9 41	0 52	21 46	0 53	23 20	23 19	22 38	1 36	4 13
M26	23 23	1n30	5 17	20 4	0s12	17 24	3 51	18 50	1 16	14 51	1 6	22 2	0 1	14 34	0 26	9 41	0 52	21 46	0 53	23 20	23 18	22 39	1 36	4 13
T 27	23 21	6 46	5 11	19 42	0 25	17 19	3 57	18 39	1 15	14 50	1 5	22 1	0 1	14 35	0 26	9 40	0 52	21 47	0 53	23 20	23 18	22 39	1 36	4 13
W28	23 19	11 50	4 47	19 20	0 38	17 11	4 2	18 29	1 15	14 50	1 5	22 0	0 1	14 36	0 26	9 40	0 52	21 47	0 53	23 20	23 18	22 39	1 36	4 13
T 29	23 16	16 24	4 6	18 59	0 52	17 14	4 7	18 18	1 15	14 49	1 5	21 59	0 1	14 36	0 26	9 39	0 52	21 47	0 53	23 20	23 18	22 40	1 36	4 14
F 30	23n12	20n 6	3n 8	18n38	1s 6	17n 8	4s12	18n 7	1n14	14s49	1n 4	21n58	0s 1	14n37	0s26	9n39	0n52	21s47	0n53	23s20	23s18	22s40	1n36	4n14

# ASTRODIENST EPHEMERIS for the year 1769

## geocentric

JULY 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 37 14	9♄1742	2♂19	2♂38	5♂45	13♂38	13♂R14	20♄ 7	10♂38	7♂20	14♂R36	23♂55	23♂13	4♂22	24♂R17	S 1
S 2	18 41 11	10°14'55	17°12	3° 2	5°58	14°15	13♂12	20°15	10°41	7°21	14♄35	23♂R56	23°10	4°29	24♂16	S 2
M 3	18 45 7	11°12'08	2♄ 8	3°21	6°13	14°52	13°11	20°22	10°43	7°22	14°33	23°56	23° 6	4°35	24°16	M 3
T 4	18 49 4	12° 9'21	16°58	3°36	6°30	15°29	13°10	20°30	10°45	7°24	14°32	23°55	23° 3	4°42	24°16	T 4
W 5	18 53 0	13° 6'34	1♂35	3°47	6°49	16° 6	13° 9	20°38	10°47	7°25	14°30	23°53	23° 0	4°49	24°15	W 5
T 6	18 56 57	14° 3'48	15°53	3°52	7°10	16°43	13° 8	20°45	10°49	7°27	14°29	23°51	22°57	4°55	24°15	T 6
F 7	19 0 53	15° 1'01	29°47	3°R53	7°32	17°20	13° 7	20°53	10°51	7°28	14°27	23°48	22°54	5° 2	24°14	F 7
S 8	19 4 50	15°58'14	13♂15	3°50	7°56	17°57	13° 7	21° 1	10°52	7°30	14°26	23°45	22°50	5° 9	24°14	S 8
S 9	19 8 46	16°55'27	26°17	3°41	8°22	18°34	13° 7	21° 9	10°54	7°31	14°24	23°43	22°47	5°15	24°13	S 9
M10	19 12 43	17°52'40	8♄57	3°28	8°49	19°12	13°D 6	21°17	10°56	7°33	14°23	23°41	22°44	5°22	24°12	M10
T 11	19 16 40	18°49'53	21°17	3°10	9°18	19°49	13° 6	21°24	10°58	7°34	14°21	23°D41	22°41	5°29	24°12	T 11
W12	19 20 36	19°47'06	3♂22	2°48	9°48	20°26	13° 7	21°32	11° 0	7°36	14°20	23°42	22°38	5°35	24°11	W12
T 13	19 24 33	20°44'19	15°17	2°22	10°20	21° 3	13° 7	21°40	11° 1	7°38	14°18	23°43	22°35	5°42	24°10	T 13
F 14	19 28 29	21°41'33	27° 6	1°52	10°53	21°41	13° 8	21°48	11° 3	7°39	14°17	23°45	22°31	5°49	24° 9	F 14
S 15	19 32 26	22°38'47	8♂55	1°18	11°27	22°18	13° 9	21°55	11° 5	7°41	14°15	23°47	22°28	5°55	24° 8	S 15
S 16	19 36 22	23°36'01	20°46	0°42	12° 3	22°55	13°10	22° 3	11° 6	7°43	14°14	23°R47	22°25	6° 2	24° 7	S 16
M17	19 40 19	24°33'15	2♄44	0° 3	12°39	23°33	13°11	22°11	11° 8	7°44	14°13	23°47	22°22	6° 8	24° 6	M17
T 18	19 44 16	25°30'30	14°50	29♄22	13°17	24°10	13°12	22°19	11° 9	7°46	14°11	23°45	22°19	6°15	24° 5	T 18
W19	19 48 12	26°27'45	27° 8	28°40	13°56	24°47	13°14	22°27	11°10	7°48	14°10	23°42	22°16	6°22	24° 4	W19
T 20	19 52 9	27°25'01	9♄39	27°58	14°37	25°25	13°15	22°34	11°12	7°50	14° 8	23°37	22°12	6°28	24° 3	T 20
F 21	19 56 5	28°22'18	22°23	27°16	15°18	26° 2	13°17	22°42	11°13	7°51	14° 7	23°32	22° 9	6°35	24° 1	F 21
S 22	20 0 2	29°19'35	5♂20	26°35	16° 0	26°40	13°19	22°50	11°14	7°53	14° 5	23°26	22° 6	6°42	24° 0	S 22
S 23	20 3 58	0♄16'53	18°31	25°56	16°43	27°17	13°21	22°58	11°16	7°55	14° 4	23°21	22° 3	6°48	23°59	S 23
M24	20 7 55	1°14'12	1♂55	25°20	17°27	27°55	13°24	23° 5	11°17	7°57	14° 3	23°16	22° 0	6°55	23°57	M24
T 25	20 11 51	2°11'32	15°32	24°47	18°12	28°32	13°26	23°13	11°18	7°59	14° 1	23°13	21°56	7° 2	23°56	T 25
W26	20 15 48	3° 8'53	29°22	24°18	18°58	29°10	13°29	23°21	11°19	8° 1	14° 0	23°D12	21°53	7° 8	23°55	W26
T 27	20 19 44	4° 6'15	13♂25	23°53	19°45	29°47	13°32	23°29	11°20	8° 3	13°58	23°12	21°50	7°15	23°53	T 27
F 28	20 23 41	5° 3'39	27°38	23°33	20°32	0♄25	13°35	23°36	11°21	8° 5	13°57	23°14	21°47	7°22	23°51	F 28
S 29	20 27 38	6° 1'03	12♂ 2	23°19	21°21	1° 3	13°38	23°44	11°22	8° 6	13°56	23°15	21°44	7°28	23°50	S 29
S 30	20 31 34	6°58'29	26°33	23°11	22°10	1°40	13°42	23°52	11°23	8° 8	13°54	23°R15	21°41	7°35	23°48	S 30
M31	20 35 31	7♄55'56	11♄ 6	23°D 8	22♂59	2♂18	13♂45	23♄59	11♂24	8♂10	13♄53	23♂14	21♂37	7♂42	23♂46	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
S 1	23n 9	22n34	1n57	18n17	1s20	17n 6	4s16	17n56	1n14	14s49	1n 4	21n57	0s 1	14n38	0s26	9n38	0n52	21s48	0n53	23s20	23s18	22s41	1n37	4n14
S 2	23 4	23 28	0 37	17 58	1 35	17 4	4 19	17 45	1 14	14 48	1 4	21 56	0 1	14 38	0 26	9 38	0 52	21 48	0 53	23 20	23 18	22 41	1 37	4 14
M 3	23 0	22 42	0s45	17 39	1 50	17 4	4 22	17 34	1 13	14 48	1 4	21 55	0 1	14 39	0 26	9 37	0 52	21 48	0 52	23 20	23 17	22 42	1 37	4 14
T 4	22 55	20 20	2 4	17 21	2 5	17 4	4 25	17 23	1 13	14 48	1 3	21 54	0 1	14 39	0 26	9 37	0 52	21 48	0 52	23 20	23 17	22 42	1 37	4 14
W 5	22 49	16 41	3 13	17 4	2 20	17 4	4 28	17 11	1 13	14 48	1 3	21 52	0 1	14 40	0 26	9 36	0 52	21 49	0 52	23 20	23 17	22 42	1 37	4 15
T 6	22 44	12 8	4 9	16 48	2 35	17 6	4 30	17 0	1 12	14 48	1 3	21 51	0 0	14 41	0 26	9 36	0 52	21 49	0 52	23 20	23 17	22 43	1 37	4 15
F 7	22 37	7 4	4 48	16 33	2 50	17 7	4 32	16 48	1 12	14 48	1 3	21 50	0 0	14 41	0 26	9 35	0 52	21 49	0 52	23 19	23 17	22 43	1 37	4 15
S 8	22 31	1 49	5 10	16 19	3 5	17 10	4 33	16 36	1 12	14 48	1 2	21 49	0 0	14 42	0 26	9 35	0 52	21 49	0 52	23 19	23 17	22 44	1 36	4 15
S 9	22 24	3s20	5 15	16 7	3 19	17 12	4 35	16 25	1 11	14 48	1 2	21 48	0 0	14 42	0 26	9 34	0 52	21 50	0 52	23 19	23 16	22 44	1 36	4 15
M10	22 16	8 12	5 4	15 57	3 33	17 16	4 36	16 13	1 11	14 49	1 2	21 47	0 0	14 43	0 26	9 33	0 52	21 50	0 52	23 19	23 16	22 44	1 36	4 15
T 11	22 9	12 38	4 39	15 48	3 46	17 19	4 36	16 1	1 11	14 49	1 2	21 46	0 0	14 44	0 26	9 33	0 52	21 50	0 52	23 19	23 16	22 45	1 36	4 16
W12	22 0	16 27	4 3	15 41	3 59	17 23	4 37	15 48	1 10	14 49	1 1	21 45	0n 0	14 44	0 26	9 32	0 52	21 51	0 52	23 19	23 16	22 45	1 36	4 16
T 13	21 52	19 34	3 16	15 35	4 11	17 28	4 37	15 36	1 10	14 49	1 1	21 44	0 0	14 45	0 26	9 32	0 52	21 51	0 51	23 19	23 16	22 45	1 36	4 16
F 14	21 43	21 50	2 21	15 31	4 21	17 32	4 37	15 24	1 10	14 50	1 1	21 42	0 0	14 45	0 26	9 31	0 52	21 51	0 51	23 19	23 15	22 46	1 36	4 16
S 15	21 34	23 9	1 21	15 29	4 31	17 37	4 36	15 11	1 9	14 50	1 1	21 41	0 0	14 46	0 26	9 30	0 52	21 51	0 51	23 19	23 15	22 46	1 35	4 16
S 16	21 24	23 25	0 17	15 29	4 39	17 42	4 36	14 59	1 9	14 51	1 0	21 40	0 0	14 46	0 26	9 30	0 52	21 52	0 51	23 19	23 15	22 46	1 35	4 16
M17	21 14	22 38	0n49	15 31	4 46	17 48	4 35	14 46	1 9	14 52	1 0	21 39	0 1	14 46	0 26	9 29	0 52	21 52	0 51	23 19	23 15	22 47	1 35	4 17
T 18	21 4	20 46	1 53	15 34	4 51	17 54	4 34	14 33	1 8	14 52	1 0	21 38	0 1	14 47	0 26	9 28	0 52	21 52	0 51	23 19	23 15	22 47	1 35	4 17
W19	20 53	17 56	2 52	15 39	4 55	17 59	4 33	14 21	1 8	14 53	1 0	21 37	0 1	14 47	0 26	9 28	0 52	21 52	0 51	23 19	23 15	22 47	1 34	4 17
T 20	20 42	14 15	3 45	15 45	4 56	18 5	4 31	14 8	1 8	14 54	0 59	21 35	0 1	14 48	0 26	9 27	0 52	21 53	0 51	23 19	23 14	22 48	1 34	4 17
F 21	20 31	9 52	4 27	15 53	4 57	18 11	4 30	13 55	1 7	14 54	0 59	21 34	0 1	14 48	0 26	9 26	0 52	21 53	0 51	23 19	23 14	22 48	1 33	4 17
S 22	20 19	4 59	4 56	16 2	4 55	18 17	4 28	13 41	1 7	14 55	0 59	21 33	0 1	14 49	0 26	9 26	0 52	21 53	0 51	23 18	23 14	22 48	1 33	4 17
S 23	20 7	0n12	5 10	16 12	4 52	18 24	4 26	13 28	1 7	14 56	0 59	21 32	0 1	14 49	0 26	9 25	0 52	21 53	0 50	23 18	23 14	22 49	1 33	4 17
M24	19 55	5 28	5 7	16 24	4 47	18 30	4 24	13 15	1 6	14 57	0 58	21 31	0 1	14 49	0 26	9 24	0 52	21 54	0 50	23 18	23 14	22 49	1 32	4 18
T 25	19 42	10 33	4 48	16 36	4 40	18 36	4 22	13 2	1 6	14 58	0 58	21 29	0 1	14 50	0 26	9 24	0 52	21 54	0 50	23 18	23 13	22 49	1 32	4 18
W26	19 29	15 11	4 11	16 49	4 32	18 42	4 19	12 48	1 5	14 59	0 58	21 28	0 1	14 50	0 26	9 23	0 52	21 54	0 50	23 18	23 13	22 49	1 31	4 18
T 27	19 15	19 3	3 19	17 3	4 22	18 48	4 17	12 35	1 5	15 0	0 57	21 27	0 1	14 50	0 26	9 22	0 52	21 54	0 50	23 18	23 13	22 50	1 31	4 18
F 28	19 2	21 50	2 15	17 17	4 11	18 54	4 14	12 21	1 5	15 2	0 57	21 26	0 1	14 50	0 26	9 21	0 52	21 55	0 50	23 18	23 13	22 50	1 30	4 18
S 29	18 47	23 16	1 1	17 31	3 56	19 5	4 11	12 7	1 4	15 3	0 57	21 24	0 2	14 51	0 26	9 21	0 52	21 55	0 50	23 18	23 13	22 50	1 30	4 18
S 30	18 33	23 8	0s18	17 46	3 49	19 6	4 8	11 53	1 4	15 4	0 57	21 23	0 2	14 51	0 26	9 20	0 52	21 55	0 50	23 18	23 12	22 50	1 29	4 18
M31	18n18	21n25	1s35	18n 0	3s32	19n12	4s 5	11n40	1n 4	15s 5	0n56	21n22	0n 2	14n51	0s26	9n19	0n52	21s55	0n50	23s18	23s12	22s51	1n29	4n18



# ASTRODIENST EPHEMERIS for the year 1769

## geocentric

AUGUST 1769

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 39 27	8♂53'24	25♂37	23♂12	23♂50	2♂56	13♂49	24♂7	11♂25	8♂12	13♂R52	23♂R11	21♂34	7♂48	23♂R45	T 1
W 2	20 43 24	9°50'53	9♂59	23°23	24°41	3°33	13°53	24°14	11°25	8°14	13♂50	23♂5	21°31	7°55	23♂43	W 2
T 3	20 47 20	10°48'23	24°6	23°40	25°33	4°11	13°57	24°22	11°26	8°16	13°49	22°58	21°28	8°2	23°41	T 3
F 4	20 51 17	11°45'54	7♂55	24°4	26°25	4°49	14°1	24°30	11°27	8°18	13°48	22°50	21°25	8°8	23°39	F 4
S 5	20 55 14	12°43'26	21°21	24°34	27°18	5°27	14°6	24°37	11°27	8°20	13°47	22°42	21°22	8°15	23°37	S 5
S 6	20 59 10	13°40'59	4♂24	25°12	28°11	6°5	14°10	24°45	11°28	8°23	13°45	22°35	21°18	8°21	23°35	S 6
M 7	21 3 7	14°38'32	17°4	25°55	29°5	6°42	14°15	24°52	11°28	8°25	13°44	22°30	21°15	8°28	23°33	M 7
T 8	21 7 3	15°36'07	29°25	26°46	0♂0	7°20	14°20	25°0	11°29	8°27	13°43	22°26	21°12	8°35	23°31	T 8
W 9	21 11 0	16°33'43	11♂30	27°43	0°55	7°58	14°25	25°7	11°29	8°29	13°42	22°D25	21°9	8°41	23°29	W 9
T 10	21 14 56	17°31'19	23°25	28°46	1°51	8°36	14°30	25°15	11°30	8°31	13°41	22°25	21°6	8°48	23°27	T 10
F 11	21 18 53	18°28'57	5♂14	29°55	2°47	9°14	14°35	25°22	11°30	8°33	13°40	22°26	21°2	8°55	23°25	F 11
S 12	21 22 49	19°26'35	17°3	1♂10	3°44	9°52	14°41	25°29	11°30	8°35	13°38	22°R27	20°59	9°1	23°23	S 12
S 13	21 26 46	20°24'15	28°57	2°30	4°41	10°30	14°47	25°37	11°30	8°37	13°37	22°27	20°56	9°8	23°21	S 13
M14	21 30 43	21°21'55	11♂0	3°56	5°38	11°8	14°52	25°44	11°31	8°39	13°36	22°25	20°53	9°15	23°18	M14
T 15	21 34 39	22°19'37	23°16	5°27	6°36	11°46	14°58	25°51	11°31	8°41	13°35	22°21	20°50	9°21	23°16	T 15
W16	21 38 36	23°17'20	5♂48	7°2	7°34	12°24	15°4	25°58	11°31	8°44	13°34	22°14	20°47	9°28	23°14	W16
T 17	21 42 32	24°15'05	18°36	8°42	8°33	13°3	15°11	26°6	11°R31	8°46	13°33	22°6	20°43	9°35	23°11	T 17
F 18	21 46 29	25°12'50	1♂41	10°25	9°32	13°41	15°17	26°13	11°31	8°48	13°32	21°56	20°40	9°41	23°9	F 18
S 19	21 50 25	26°10'37	15°2	12°11	10°32	14°19	15°24	26°20	11°31	8°50	13°31	21°45	20°37	9°48	23°7	S 19
S 20	21 54 22	27°8'26	28°36	14°0	11°32	14°57	15°30	26°27	11°30	8°52	13°30	21°35	20°34	9°55	23°4	S 20
M21	21 58 18	28°6'16	12♂21	15°52	12°32	15°35	15°37	26°34	11°30	8°55	13°29	21°26	20°31	10°1	23°2	M21
T 22	22 2 15	29°4'08	26°15	17°46	13°33	16°14	15°44	26°41	11°30	8°57	13°28	21°20	20°27	10°8	22°59	T 22
W23	22 6 11	0♂2'02	10♂14	19°41	14°34	16°52	15°51	26°48	11°30	8°59	13°27	21°16	20°24	10°14	22°57	W23
T 24	22 10 8	0°59'58	24°18	21°38	15°35	17°30	15°58	26°55	11°29	9°1	13°26	21°15	20°21	10°21	22°54	T 24
F 25	22 14 5	1°57'55	8♂25	23°35	16°37	18°9	16°6	27°2	11°29	9°3	13°25	21°D15	20°18	10°28	22°52	F 25
S 26	22 18 1	2°55'55	22°33	25°33	17°39	18°47	16°13	27°9	11°29	9°6	13°25	21°R15	20°15	10°34	22°49	S 26
S 27	22 21 58	3°53'57	6♂43	27°32	18°42	19°25	16°21	27°15	11°28	9°8	13°24	21°14	20°12	10°41	22°46	S 27
M28	22 25 54	4°52'00	20°52	29°30	19°44	20°4	16°29	27°22	11°28	9°10	13°23	21°11	20°8	10°48	22°44	M28
T 29	22 29 51	5°50'05	4♂28	1♂28	20°47	20°42	16°36	27°29	11°27	9°12	13°22	21°6	20°5	10°54	22°41	T 29
W30	22 33 47	6°48'12	18°56	3°25	21°50	21°21	16°44	27°36	11°26	9°14	13°21	20°57	20°2	11°1	22°39	W30
T 31	22 37 44	7♂46'21	2♂43	5♂22	22♂54	22♂0	16♂53	27♂42	11♂26	9♂17	13♂21	20♂47	19♂59	11♂8	22♂36	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	18n 3	18n20	2s46	18n14	3s17	19n18	4s 2	11n26	1n 3	15s 7	0n56	21n21	0n 2	14n52	0s26	9n18
W 2	17 48	14 9	3 45	18 27	3 2	19 23	3 59	11 12	1 3	15 8	0 56	21 19	0 2	14 52	0 26	9 18
T 3	17 33	9 15	4 30	18 40	2 46	19 28	3 56	10 57	1 3	15 10	0 56	21 18	0 2	14 52	0 26	9 17
F 4	17 17	4 1	4 57	18 52	2 30	19 33	3 52	10 43	1 2	15 11	0 55	21 17	0 2	14 52	0 26	9 16
S 5	17 1	1s16	5 7	19 3	2 13	19 38	3 49	10 29	1 2	15 13	0 55	21 16	0 2	14 52	0 26	9 15
S 6	16 44	6 21	5 1	19 12	1 57	19 43	3 45	10 15	1 1	15 14	0 55	21 14	0 2	14 52	0 26	9 15
M 7	16 28	11 1	4 40	19 20	1 41	19 47	3 41	10 0	1 1	15 16	0 55	21 13	0 2	14 53	0 26	9 14
T 8	16 11	15 7	4 6	19 27	1 24	19 51	3 37	9 46	1 1	15 17	0 55	21 12	0 2	14 53	0 26	9 13
W 9	15 54	18 30	3 22	19 32	1 8	19 55	3 33	9 31	1 0	15 19	0 54	21 11	0 3	14 53	0 26	9 12
T 10	15 36	21 4	2 30	19 35	0 52	19 58	3 29	9 17	1 0	15 21	0 54	21 9	0 3	14 53	0 26	9 12
F 11	15 18	22 42	1 31	19 35	0 37	20 1	3 25	9 2	0 59	15 23	0 54	21 8	0 3	14 53	0 26	9 11
S 12	15 0	23 19	0 29	19 34	0 22	20 4	3 21	8 47	0 59	15 25	0 54	21 7	0 3	14 53	0 26	9 10
S 13	14 42	22 53	0n35	19 30	0 8	20 6	3 17	8 33	0 59	15 26	0 53	21 6	0 3	14 53	0 26	9 9
M14	14 24	21 23	1 38	19 23	0n 6	20 8	3 13	8 18	0 58	15 28	0 53	21 4	0 3	14 53	0 26	9 8
T 15	14 5	18 53	2 37	19 14	0 19	20 10	3 9	8 3	0 58	15 30	0 53	21 3	0 3	14 53	0 26	9 8
W16	13 46	15 27	3 30	19 2	0 31	20 11	3 4	7 48	0 58	15 32	0 53	21 2	0 3	14 53	0 26	9 7
T 17	13 27	11 15	4 14	18 47	0 42	20 12	3 0	7 33	0 57	15 34	0 52	21 1	0 3	14 53	0 26	9 6
F 18	13 8	6 27	4 45	18 29	0 52	20 12	2 56	7 18	0 57	15 36	0 52	20 59	0 3	14 53	0 26	9 5
S 19	12 48	1 16	5 1	18 9	1 2	20 12	2 51	7 3	0 56	15 39	0 52	20 58	0 3	14 53	0 26	9 4
S 20	12 29	4n 3	5 1	17 46	1 10	20 12	2 47	6 48	0 56	15 41	0 52	20 57	0 4	14 53	0 26	9 3
M21	12 9	9 14	4 44	17 20	1 18	20 11	2 42	6 32	0 56	15 43	0 52	20 56	0 4	14 53	0 26	9 3
T 22	11 49	14 1	4 9	16 52	1 25	20 10	2 37	6 17	0 55	15 45	0 51	20 54	0 4	14 53	0 26	9 2
W23	11 28	18 4	3 20	16 22	1 30	20 8	2 33	6 2	0 55	15 47	0 51	20 53	0 4	14 53	0 26	9 1
T 24	11 8	21 6	2 18	15 49	1 35	20 6	2 28	5 47	0 54	15 50	0 51	20 52	0 4	14 53	0 26	9 0
F 25	10 47	22 51	1 8	15 14	1 39	20 3	2 24	5 31	0 54	15 52	0 51	20 51	0 4	14 53	0 26	8 59
S 26	10 26	23 9	0s 7	14 37	1 42	20 0	2 19	5 16	0 54	15 54	0 50	20 49	0 4	14 52	0 27	8 58
S 27	10 5	21 57	1 21	13 59	1 45	19 57	2 14	5 0	0 53	15 57	0 50	20 48	0 4	14 52	0 27	8 58
M28	9 44	19 22	2 30	13 19	1 46	19 53	2 10	4 45	0 53	15 59	0 50	20 47	0 4	14 52	0 27	8 57
T 29	9 23	15 39	3 30	12 38	1 47	19 48	2 5	4 29	0 52	16 2	0 50	20 46	0 4	14 52	0 27	8 56
W30	9 1	11 6	4 16	11 55	1 47	19 43	2 0	4 14	0 52	16 4	0 50	20 44	0 4	14 52	0 27	8 55
T 31	8n40	6n 3	4s46	11n12	1n46	19n37	1s56	3n58	0n51	16s 7	0n49	20n43	0n 5	14n51	0s27	8n54

Julian Day Number = 2367386.5, Delta T = 21.06 sec  
 Ecliptic obliquity = 23°28'08", Nutation = 0°00'18", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°31'24", Lahiri = 20°38'24"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

SEPTEMBER 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 41 40	8♍44'31	16♍16	7♍19	23♍58	22♍38	17♍1	27♍49	11°R25	9♍19	13°R20	20°R35	19♍56	11♍14	22°R33	F 1
S 2	22 45 37	9°42'43	29°31	9°14	25° 2	23°17	17° 9	27°55	11♍24	9°21	13♍19	20♍22	19°53	11°21	22♍30	S 2
S 3	22 49 34	10°40'57	12♍26	11° 9	26° 6	23°55	17°18	28° 2	11°23	9°23	13°19	20°11	19°49	11°28	22°28	S 3
M 4	22 53 30	11°39'13	25° 2	13° 2	27°11	24°34	17°26	28° 8	11°22	9°26	13°18	20° 2	19°46	11°34	22°25	M 4
T 5	22 57 27	12°37'30	7♍21	14°55	28°15	25°13	17°35	28°14	11°22	9°28	13°18	19°55	19°43	11°41	22°22	T 5
W 6	23 1 23	13°35'48	19°25	16°46	29°20	25°52	17°44	28°21	11°21	9°30	13°17	19°51	19°40	11°48	22°19	W 6
T 7	23 5 20	14°34'09	1♍19	18°36	0♍26	26°30	17°53	28°27	11°20	9°32	13°16	19°49	19°37	11°54	22°17	T 7
F 8	23 9 16	15°32'31	13° 8	20°26	1°31	27° 9	18° 2	28°33	11°18	9°34	13°16	19°48	19°33	12° 1	22°14	F 8
S 9	23 13 13	16°30'54	24°56	22°14	2°37	27°48	18°11	28°39	11°17	9°37	13°15	19°48	19°30	12° 7	22°11	S 9
S 10	23 17 9	17°29'19	6♍51	24° 1	3°43	28°27	18°20	28°45	11°16	9°39	13°15	19°48	19°27	12°14	22° 8	S 10
M11	23 21 6	18°27'46	18°57	25°47	4°49	29° 6	18°30	28°51	11°15	9°41	13°15	19°45	19°24	12°21	22° 6	M11
T 12	23 25 3	19°26'14	1♍18	27°32	5°55	29°45	18°39	28°57	11°14	9°43	13°14	19°40	19°21	12°27	22° 3	T 12
W13	23 28 59	20°24'44	13°59	29°15	7° 2	0♍24	18°49	29° 3	11°13	9°46	13°14	19°33	19°18	12°34	22° 0	W13
T 14	23 32 56	21°23'16	27° 1	0♍58	8° 9	1° 3	18°59	29° 9	11°11	9°48	13°13	19°23	19°14	12°41	21°57	T 14
F 15	23 36 52	22°21'49	10♍24	2°40	9°16	1°42	19° 8	29°14	11°10	9°50	13°13	19°11	19°11	12°47	21°54	F 15
S 16	23 40 49	23°20'25	24° 8	4°20	10°23	2°21	19°18	29°20	11° 8	9°52	13°13	18°59	19° 8	12°54	21°51	S 16
S 17	23 44 45	24°19'02	8♍7	6° 0	11°30	3° 0	19°28	29°26	11° 7	9°54	13°13	18°47	19° 5	13° 1	21°49	S 17
M18	23 48 42	25°17'41	22°19	7°39	12°38	3°39	19°38	29°31	11° 6	9°56	13°12	18°37	19° 2	13° 7	21°46	M18
T 19	23 52 38	26°16'23	6♍37	9°16	13°46	4°18	19°49	29°36	11° 4	9°59	13°12	18°30	18°58	13°14	21°43	T 19
W20	23 56 35	27°15'07	20°56	10°53	14°54	4°57	19°59	29°42	11° 2	10° 1	13°12	18°25	18°55	13°21	21°40	W20
T 21	0 0 32	28°13'53	5♍12	12°29	16° 2	5°37	20° 9	29°47	11° 1	10° 3	13°12	18°23	18°52	13°27	21°38	T 21
F 22	0 4 28	29°12'41	19°24	14° 3	17°10	6°16	20°20	29°52	10°59	10° 5	13°12	18°D23	18°49	13°34	21°35	F 22
S 23	0 8 25	0♍11'32	3♍30	15°37	18°19	6°55	20°30	29°57	10°58	10° 7	13°12	18°R23	18°46	13°41	21°32	S 23
S 24	0 12 21	1°10'25	17°28	17°10	19°27	7°35	20°41	0♍3	10°56	10° 9	13°12	18°22	18°43	13°47	21°29	S 24
M25	0 16 18	2° 9'20	1♍18	18°42	20°36	8°14	20°52	0° 8	10°54	10°11	13°D12	18°19	18°39	13°54	21°26	M25
T 26	0 20 14	3° 8'18	15° 1	20°14	21°45	8°53	21° 3	0°12	10°52	10°13	13°12	18°14	18°36	14° 0	21°24	T 26
W27	0 24 11	4° 7'18	28°34	21°44	22°54	9°33	21°14	0°17	10°51	10°16	13°12	18° 5	18°33	14° 7	21°21	W27
T 28	0 28 7	5° 6'20	11♍57	23°13	24° 3	10°12	21°25	0°22	10°49	10°18	13°12	17°55	18°30	14°14	21°18	T 28
F 29	0 32 4	6° 5'24	25° 7	24°42	25°13	10°52	21°36	0°27	10°47	10°20	13°12	17°43	18°27	14°20	21°16	F 29
S 30	0 36 0	7♍4'30	8♍4	26♍9	26♍22	11♍31	21♍47	0♍31	10♍45	10♍22	13♍12	17♍30	18♍24	14♍27	21♍13	S 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	8n18	0n49	5s 0	10n27	1n45	19n31	1s51	3n42	0n51	16s 9	0n49	20n42	0n 5	14n51	0s27	8n54	0n52	22s 2	0n46	23s 8	23s 5	22s56	1n 2	4n20	
S 2	7 56	4s21	4 57	9 42	1 43	19 25	1 46	3 27	0 51	16 12	0 49	20 41	0 5	14 51	0 27	8 53	0 52	22 2	0 46	23 7	23 5	22 56	1 0	4 20	
S 3	7 34	9 12	4 39	8 57	1 40	19 18	1 41	3 11	0 50	16 14	0 49	20 40	0 5	14 51	0 27	8 52	0 52	22 3	0 46	23 6	23 5	22 56	0 59	4 20	
M 4	7 12	13 32	4 7	8 10	1 38	19 10	1 37	2 55	0 50	16 17	0 49	20 38	0 5	14 50	0 27	8 51	0 52	22 3	0 46	23 6	23 4	22 56	0 58	4 20	
T 5	6 50	17 12	3 25	7 24	1 34	19 2	1 32	2 40	0 49	16 19	0 48	20 37	0 5	14 50	0 27	8 50	0 52	22 3	0 45	23 5	23 4	22 56	0 57	4 20	
W 6	6 27	20 4	2 34	6 37	1 30	18 53	1 27	2 24	0 49	16 22	0 48	20 36	0 5	14 50	0 27	8 49	0 52	22 3	0 45	23 5	23 4	22 56	0 56	4 20	
T 7	6 5	22 1	1 36	5 50	1 26	18 44	1 23	2 8	0 48	16 25	0 48	20 35	0 5	14 49	0 27	8 49	0 52	22 3	0 45	23 5	23 4	22 56	0 55	4 20	
F 8	5 42	22 59	0 35	5 3	1 21	18 35	1 18	1 52	0 48	16 28	0 48	20 34	0 5	14 49	0 27	8 48	0 52	22 3	0 45	23 5	23 3	22 56	0 54	4 20	
S 9	5 20	22 55	0n27	4 16	1 17	18 25	1 13	1 36	0 48	16 30	0 48	20 33	0 5	14 49	0 27	8 47	0 52	22 4	0 45	23 5	23 3	22 56	0 53	4 20	
S 10	4 57	21 48	1 29	3 28	1 11	18 14	1 9	1 20	0 47	16 33	0 47	20 32	0 6	14 48	0 27	8 46	0 52	22 4	0 45	23 5	23 3	22 56	0 52	4 20	
M11	4 34	19 41	2 28	2 41	1 6	18 3	1 4	1 4	0 47	16 36	0 47	20 30	0 6	14 48	0 27	8 45	0 52	22 4	0 45	23 4	23 3	22 56	0 50	4 20	
T 12	4 11	16 38	3 21	1 54	1 0	17 51	0 59	0 49	0 46	16 39	0 47	20 29	0 6	14 48	0 27	8 44	0 52	22 4	0 45	23 4	23 2	22 56	0 49	4 20	
W13	3 48	12 44	4 5	1 7	0 54	17 39	0 55	0 33	0 46	16 41	0 47	20 28	0 6	14 47	0 27	8 44	0 52	22 4	0 45	23 3	23 2	22 56	0 48	4 20	
T 14	3 25	8 10	4 38	0 21	0 48	17 26	0 50	0 17	0 45	16 44	0 47	20 27	0 6	14 47	0 27	8 43	0 52	22 4	0 44	23 3	23 2	22 56	0 47	4 20	
F 15	3 2	3 5	4 57	0s26	0 41	17 13	0 46	0 1	0 45	16 47	0 47	20 26	0 6	14 46	0 27	8 42	0 52	22 5	0 44	23 2	23 2	22 56	0 46	4 20	
S 16	2 39	2n15	4 59	1 12	0 35	17 0	0 41	0s15	0 44	16 50	0 46	20 25	0 6	14 46	0 27	8 41	0 52	22 5	0 44	23 1	23 1	22 56	0 45	4 20	
S 17	2 16	7 34	4 44	1 57	0 28	16 46	0 37	0 31	0 44	16 53	0 46	20 24	0 6	14 45	0 27	8 40	0 52	22 5	0 44	23 0	23 1	22 56	0 43	4 20	
M18	1 52	12 34	4 11	2 43	0 21	16 31	0 33	0 47	0 44	16 56	0 46	20 23	0 6	14 45	0 27	8 40	0 52	22 5	0 44	22 59	23 1	22 56	0 42	4 19	
T 19	1 29	16 55	3 22	3 27	0 14	16 16	0 28	1 3	0 43	16 59	0 46	20 22	0 6	14 45	0 27	8 39	0 52	22 5	0 44	22 58	23 1	22 56	0 41	4 19	
W20	1 6	20 15	2 20	4 12	0 7	16 0	0 24	1 19	0 43	17 2	0 46	20 21	0 7	14 44	0 27	8 38	0 52	22 5	0 44	22 58	23 0	22 56	0 40	4 19	
T 21	0 42	22 20	1 9	4 56	0 0	15 44	0 20	1 35	0 42	17 4	0 45	20 20	0 7	14 44	0 27	8 37	0 52	22 5	0 44	22 58	23 0	22 56	0 39	4 19	
F 22	0 19	22 57	0s 5	5 40	0s 7	15 28	0 16	1 51	0 42	17 7	0 45	20 19	0 7	14 43	0 27	8 36	0 52	22 6	0 43	22 58	23 0	22 55	0 37	4 19	
S 23	0s 5	22 6	1 19	6 23	0 14	15 11	0 11	2 7	0 41	17 10	0 45	20 18	0 7	14 43	0 27	8 36	0 52	22 6	0 43	22 58	23 0	22 55	0 36	4 19	
S 24	0 28	19 53	2 28	7 5	0 22	14 53	0 7	2 23	0 41	17 13	0 45	20 17	0 7	14 42	0 27	8 35	0 52	22 6	0 43	22 58	22 59	22 55	0 35	4 19	
M25	0 52	16 32	3 27	7 47	0 29	14 35	0 3	2 39	0 40	17 16	0 45	20 16	0 7	14 41	0 27	8 34	0 52	22 6	0 43	22 57	22 59	22 55	0 34	4 19	
T 26	1 15	12 19	4 13	8 28	0 36	14 17	0n 1	2 55	0 40	17 19	0 45	20 15	0 7	14 41	0 27	8 33	0 53	22 6	0 43	22 57	22 59	22 55	0 33	4 19	
W27	1 38	7 32	4 45	9 9	0 44	13 58	0 5	3 11	0 39	17 22	0 44	20 14	0 7	14 40	0 27	8 32	0 53	22 6	0 43	22 56	22 58	22 55	0 32	4 19	
T 28	2 2	2 28	5 0	9 49	0 51	13 39	0 9	3 27	0 39	17 25	0 44	20 13	0 7	14 40	0 27	8 32	0 53	22 6	0 43	22 55	22 58	22 55	0 30	4 18	
F 29	2 25	2s38	4 59	10 29	0 58	13 20	0 13	3 43	0 38	17 28	0 44	20 12	0 7	14 39	0 27	8 31	0 53	22 6	0 43	22 54	22 58	22 55	0 29	4 18	
S 30	2s49	7s32	4s43	11s 8	1s 5	13n 0	0n16	3s59	0n38	17s31	0n44	20n11	0n 8	14n38	0s27	8n30	0n53	22s 6	0n43	22s53	22s58	22s55	0n28	4n18	

# ASTRODIENST EPHEMERIS for the year 1769

## geocentric

OCTOBER 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 39 57	8♂ 3'38	20♂45	27♂36	27♂32	12♂11	21♂58	0♂36	10°R43	10♂24	13♂12	17°R19	18♂20	14♂34	21°R10	S 1
M 2	0 43 54	9° 2'48	3♂11	29° 2	28°42	12°51	22° 9	0°40	10♂41	10°26	13°12	17♂ 9	18°17	14°40	21♂ 8	M 2
T 3	0 47 50	10° 2'01	15°23	0♂26	29°52	13°30	22°21	0°44	10°39	10°28	13°13	17° 2	18°14	14°47	21° 5	T 3
W 4	0 51 47	11° 1'15	27°23	1°50	1♂ 2	14°10	22°32	0°49	10°37	10°30	13°13	16°58	18°11	14°54	21° 2	W 4
T 5	0 55 43	12° 0'31	9♂15	3°13	2°12	14°50	22°44	0°53	10°35	10°32	13°13	16°56	18° 8	15° 0	21° 0	T 5
F 6	0 59 40	12°59'49	21° 2	4°35	3°23	15°30	22°55	0°57	10°33	10°34	13°13	16°D55	18° 4	15° 7	20°57	F 6
S 7	1 3 36	13°59'09	2♂50	5°56	4°33	16°10	23° 7	1° 1	10°31	10°36	13°14	16°56	18° 1	15°14	20°55	S 7
S 8	1 7 33	14°58'30	14°43	7°15	5°44	16°49	23°19	1° 5	10°28	10°37	13°14	16°R57	17°58	15°20	20°52	S 8
M 9	1 11 29	15°57'54	26°48	8°33	6°55	17°29	23°31	1° 8	10°26	10°39	13°15	16°56	17°55	15°27	20°50	M 9
T 10	1 15 26	16°57'19	9♂ 9	9°51	8° 6	18° 9	23°43	1°12	10°24	10°41	13°15	16°53	17°52	15°33	20°47	T 10
W11	1 19 23	17°56'46	21°52	11° 6	9°17	18°49	23°54	1°16	10°22	10°43	13°15	16°49	17°49	15°40	20°45	W11
T 12	1 23 19	18°56'14	4♂58	12°21	10°28	19°29	24° 6	1°19	10°20	10°45	13°16	16°42	17°45	15°47	20°43	T 12
F 13	1 27 16	19°55'45	18°31	13°33	11°39	20° 9	24°19	1°23	10°17	10°47	13°16	16°33	17°42	15°53	20°40	F 13
S 14	1 31 12	20°55'17	2♂28	14°44	12°50	20°49	24°31	1°26	10°15	10°49	13°17	16°24	17°39	16° 0	20°38	S 14
S 15	1 35 9	21°54'51	16°47	15°54	14° 2	21°30	24°43	1°29	10°13	10°50	13°18	16°15	17°36	16° 7	20°36	S 15
M16	1 39 5	22°54'28	1♂22	17° 1	15°13	22°10	24°55	1°32	10°10	10°52	13°18	16° 7	17°33	16°13	20°33	M16
T 17	1 43 2	23°54'06	16° 6	18° 6	16°25	22°50	25° 7	1°35	10° 8	10°54	13°19	16° 1	17°30	16°20	20°31	T 17
W18	1 46 58	24°53'47	0♂15	19° 9	17°37	23°30	25°20	1°38	10° 6	10°56	13°20	15°58	17°26	16°27	20°29	W18
T 19	1 50 55	25°53'29	15°31	20° 9	18°49	24°10	25°32	1°41	10° 3	10°57	13°20	15°D57	17°23	16°33	20°27	T 19
F 20	1 54 52	26°53'15	29°59	21° 6	20° 1	24°51	25°45	1°44	10° 1	10°59	13°21	15°58	17°20	16°40	20°25	F 20
S 21	1 58 48	27°53'02	14♂13	22° 0	21°13	25°31	25°57	1°46	9°58	11° 1	13°22	15°59	17°17	16°47	20°22	S 21
S 22	2 2 45	28°52'52	28°13	22°50	22°25	26°12	26°10	1°49	9°56	11° 2	13°23	16°R 0	17°14	16°53	20°20	S 22
M23	2 6 41	29°52'43	11♂27	23°37	23°37	26°52	26°22	1°51	9°54	11° 4	13°23	15°59	17°10	17° 0	20°18	M23
T 24	2 10 38	0♂52'38	25°26	24°19	24°50	27°33	26°35	1°53	9°51	11° 6	13°24	15°56	17° 7	17° 6	20°16	T 24
W25	2 14 34	1°52'34	8♂40	24°56	26° 2	28°13	26°48	1°56	9°49	11° 7	13°25	15°52	17° 4	17°13	20°15	W25
T 26	2 18 31	2°52'32	21°41	25°28	27°15	28°54	27° 0	1°58	9°46	11° 9	13°26	15°45	17° 1	17°20	20°13	T 26
F 27	2 22 27	3°52'33	4♂30	25°54	28°27	29°34	27°13	2° 0	9°44	11°10	13°27	15°38	16°58	17°26	20°11	F 27
S 28	2 26 24	4°52'35	17° 5	26°13	29°40	0♂15	27°26	2° 2	9°41	11°12	13°28	15°30	16°55	17°33	20° 9	S 28
S 29	2 30 21	5°52'40	29°29	26°26	0♂53	0°56	27°39	2° 3	9°39	11°13	13°29	15°23	16°51	17°40	20° 7	S 29
M30	2 34 17	6°52'46	11♂42	26°R30	2° 6	1°36	27°52	2° 5	9°36	11°15	13°30	15°17	16°48	17°46	20° 6	M30
T 31	2 38 14	7♂52'54	23♂45	26♂26	3♂19	2♂17	28♂ 5	2♂ 6	9♂34	11♂16	13♂31	15♂13	16♂45	17♂53	20♂ 4	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	3s12	12s 1	4s13	11s46	1s13	12n39	0n20	4s15	0n38	17s35	0n44	20n10	0n 8	14n38	0s27	8n29
M 2	3 35	15 53	3 31	12 23	1 20	12 19	0 24	4 31	0 37	17 38	0 44	20 10	0 8	14 37	0 27	8 29
T 3	3 59	19 1	2 40	13 0	1 27	11 58	0 27	4 47	0 37	17 41	0 44	20 9	0 8	14 37	0 27	8 28
W 4	4 22	21 16	1 42	13 36	1 34	11 36	0 31	5 2	0 36	17 44	0 43	20 8	0 8	14 36	0 27	8 27
T 5	4 45	22 32	0 41	14 11	1 41	11 14	0 34	5 18	0 36	17 47	0 43	20 7	0 8	14 35	0 27	8 27
F 6	5 8	22 48	0n22	14 45	1 47	10 52	0 38	5 34	0 35	17 50	0 43	20 6	0 8	14 35	0 27	8 26
S 7	5 31	22 2	1 24	15 18	1 54	10 29	0 41	5 50	0 35	17 53	0 43	20 6	0 8	14 34	0 27	8 25
S 8	5 54	20 17	2 23	15 51	2 0	10 6	0 44	6 6	0 34	17 56	0 43	20 5	0 8	14 33	0 27	8 24
M 9	6 17	17 36	3 17	16 22	2 6	9 43	0 47	6 21	0 34	17 59	0 43	20 4	0 9	14 33	0 27	8 24
T 10	6 40	14 5	4 2	16 53	2 13	9 20	0 51	6 37	0 33	18 2	0 43	20 3	0 9	14 32	0 27	8 23
W11	7 3	9 51	4 38	17 22	2 18	8 56	0 54	6 53	0 33	18 5	0 42	20 3	0 9	14 31	0 27	8 23
T 12	7 26	5 3	4 59	17 51	2 24	8 32	0 57	7 8	0 32	18 8	0 42	20 2	0 9	14 31	0 27	8 22
F 13	7 48	0n 8	5 6	18 18	2 29	8 7	0 59	7 24	0 32	18 11	0 42	20 1	0 9	14 30	0 27	8 21
S 14	8 11	5 29	4 54	18 44	2 34	7 42	1 2	7 39	0 31	18 15	0 42	20 1	0 9	14 29	0 27	8 20
S 15	8 33	10 40	4 24	19 3	2 39	7 17	1 5	7 55	0 31	18 18	0 42	20 0	0 9	14 28	0 27	8 20
M16	8 55	15 20	3 36	19 33	2 43	6 52	1 8	8 10	0 30	18 21	0 42	20 0	0 9	14 28	0 27	8 19
T 17	9 17	19 8	2 34	19 55	2 47	6 27	1 10	8 26	0 30	18 24	0 42	19 59	0 9	14 27	0 27	8 18
W18	9 39	21 40	1 21	20 16	2 51	6 1	1 13	8 41	0 29	18 27	0 41	19 58	0 10	14 26	0 27	8 18
T 19	10 1	22 43	0 2	20 36	2 54	5 35	1 15	8 57	0 29	18 30	0 41	19 58	0 10	14 25	0 27	8 17
F 20	10 23	22 13	1s15	20 54	2 57	5 9	1 17	9 12	0 28	18 33	0 41	19 57	0 10	14 25	0 27	8 17
S 21	10 44	20 17	2 27	21 10	2 59	4 42	1 20	9 27	0 28	18 36	0 41	19 57	0 10	14 24	0 27	8 16
S 22	11 5	17 9	3 28	21 24	3 0	4 16	1 22	9 42	0 27	18 39	0 41	19 57	0 10	14 23	0 27	8 15
M23	11 27	13 7	4 17	21 37	3 1	3 49	1 24	9 57	0 27	18 42	0 41	19 56	0 10	14 22	0 27	8 15
T 24	11 48	8 31	4 50	21 48	3 1	3 22	1 26	10 12	0 26	18 45	0 41	19 56	0 10	14 22	0 27	8 14
W25	12 8	3 35	5 7	21 56	3 0	2 55	1 28	10 27	0 26	18 48	0 41	19 55	0 10	14 21	0 27	8 14
T 26	12 29	1s25	5 8	22 2	2 58	2 28	1 29	10 42	0 25	18 51	0 40	19 55	0 10	14 20	0 27	8 13
F 27	12 50	6 16	4 53	22 6	2 55	2 1	1 31	10 57	0 24	18 54	0 40	19 55	0 11	14 19	0 27	8 12
S 28	13 10	10 47	4 24	22 6	2 51	1 33	1 33	11 12	0 24	18 57	0 40	19 54	0 11	14 19	0 27	8 12
S 29	13 30	14 47	3 43	22 4	2 46	1 6	1 34	11 27	0 23	19 0	0 40	19 54	0 11	14 18	0 27	8 11
M30	13 50	18 6	2 52	21 59	2 40	0 38	1 36	11 41	0 23	19 3	0 40	19 54	0 11	14 17	0 27	8 11
T 31	14s 9	20s35	1s54	21s51	2s32	0n10	1n37	11s56	0n22	19s 6	0n40	19n54	0n11	14n16	0s27	8n10

Julian Day Number = 2367447.5, Delta T = 21.09 sec  
 Ecliptic obliquity = 23°28'08, Nutation = 0°00'16, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 21°31'32, Lahiri = 20°38'33Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

NOVEMBER 1769

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	2 42 10	8♌53°05	5♊40	26°R13	4♎32	2♌58	28♌18	2♎8	9°R31	11♏17	13♐32	15°R11	16♑42	18♒0	20°R 2	W 1
T 2	2 46 7	9°53'16	17°29	25♌51	5°45	3°39	28°31	2°9	9♏29	11°19	13°33	15°D10	16°39	18°6	20♑1	T 2
F 3	2 50 3	10°53'30	29°15	25°19	6°58	4°20	28°44	2°10	9°26	11°20	13°34	15♑11	16°35	18°13	19°59	F 3
S 4	2 54 0	11°53'45	11♐2	24°37	8°11	5°1	28°57	2°11	9°24	11°21	13°35	15°13	16°32	18°20	19°58	S 4
S 5	2 57 56	12°54'02	22°54	23°46	9°24	5°42	29°10	2°12	9°21	11°23	13°37	15°15	16°29	18°26	19°56	S 5
M 6	3 1 53	13°54'20	4♋57	22°45	10°38	6°23	29°23	2°13	9°19	11°24	13°38	15°16	16°26	18°33	19°55	M 6
T 7	3 5 50	14°54'39	17°15	21°37	11°51	7°4	29°36	2°14	9°17	11°25	13°39	15°R16	16°23	18°39	19°54	T 7
W 8	3 9 46	15°55'00	29°53	20°23	13°5	7°45	29°50	2°15	9°14	11°26	13°40	15°15	16°20	18°46	19°52	W 8
T 9	3 13 43	16°55'23	12♋55	19°4	14°18	8°26	0♊3	2°15	9°12	11°27	13°41	15°13	16°16	18°53	19°51	T 9
F 10	3 17 39	17°55'47	26°25	17°44	15°32	9°7	0°16	2°16	9°9	11°29	13°43	15°10	16°13	18°59	19°50	F 10
S 11	3 21 36	18°56'12	10♑22	16°24	16°46	9°48	0°29	2°16	9°7	11°30	13°44	15°6	16°10	19°6	19°49	S 11
S 12	3 25 32	19°56'38	24°46	15°8	17°59	10°30	0°43	2°16	9°4	11°31	13°45	15°2	16°7	19°13	19°48	S 12
M13	3 29 29	20°57'06	9♐32	13°58	19°13	11°11	0°56	2°R16	9°2	11°32	13°47	14°59	16°4	19°19	19°47	M13
T 14	3 33 25	21°57'36	24°32	12°55	20°27	11°52	1°9	2°16	8°59	11°33	13°48	14°57	16°1	19°26	19°46	T 14
W15	3 37 22	22°58'07	9♌38	12°3	21°41	12°34	1°23	2°16	8°57	11°34	13°50	14°D56	15°57	19°33	19°45	W15
T 16	3 41 19	23°58'40	24°41	11°21	22°55	13°15	1°36	2°16	8°55	11°35	13°51	14°56	15°54	19°39	19°44	T 16
F 17	3 45 15	24°59'15	9♐33	10°51	24°9	13°57	1°49	2°15	8°52	11°36	13°53	14°57	15°51	19°46	19°43	F 17
S 18	3 49 12	25°59'51	24°7	10°32	25°23	14°38	2°3	2°15	8°50	11°37	13°54	14°58	15°48	19°53	19°43	S 18
S 19	3 53 8	27°0'29	8♎20	10°D25	26°37	15°20	2°16	2°14	8°48	11°37	13°56	14°59	15°45	19°59	19°42	S 19
M20	3 57 5	28°1'09	22°10	10°29	27°51	16°1	2°30	2°14	8°45	11°38	13°57	15°R 0	15°41	20°6	19°41	M20
T 21	4 1 1	29°1'50	5♏37	10°44	29°5	16°43	2°43	2°13	8°43	11°39	13°59	15°0	15°38	20°13	19°41	T 21
W22	4 4 58	0♊2'33	18°44	11°8	0♌20	17°25	2°56	2°12	8°41	11°40	14°0	14°59	15°35	20°19	19°40	W22
T 23	4 8 54	1°3'18	1♎32	11°40	1°34	18°6	3°10	2°11	8°39	11°41	14°2	14°58	15°32	20°26	19°40	T 23
F 24	4 12 51	2°4'04	14°5	12°20	2°48	18°48	3°23	2°10	8°36	11°41	14°3	14°56	15°29	20°32	19°39	F 24
S 25	4 16 48	3°4'52	26°24	13°7	4°3	19°30	3°37	2°8	8°34	11°42	14°5	14°54	15°26	20°39	19°39	S 25
S 26	4 20 44	4°5'41	8♌33	14°0	5°17	20°12	3°50	2°7	8°32	11°42	14°7	14°52	15°22	20°46	19°39	S 26
M27	4 24 41	5°6'31	20°33	14°59	6°32	20°54	4°4	2°5	8°30	11°43	14°8	14°51	15°19	20°52	19°39	M27
T 28	4 28 37	6°7'23	2♊27	16°2	7°46	21°36	4°17	2°4	8°28	11°44	14°10	14°50	15°16	20°59	19°38	T 28
W29	4 32 34	7°8'16	14°17	17°9	9°1	22°18	4°31	2°2	8°26	11°44	14°12	14°D50	15°13	21°6	19°38	W29
T 30	4 36 30	8♒9'10	26♊4	18♌19	10♌15	23♌0	4♊44	2♎0	8♐23	11♏45	14♐13	14♑50	15♑10	21♒12	19°D38	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
W 1	14s29	22s 7	0s52	21s38	2s22	0s18	1n38	12s10	0n22	19s 9	0n40	19n53	0n11	14n15	0s27	8n10	0n54	22s 8	0n39	22s39	22s48	22s49	0s 6	4n12	
T 2	14 48	22 40	0n13	21 22	2 11	0 46	1 40	12 25	0 21	19 12	0 40	19 53	0 11	14 15	0 27	8 9	0 54	22 8	0 39	22 39	22 48	22 48	0 6	4 11	
F 3	15 7	22 12	1 16	21 2	1 59	1 13	1 41	12 39	0 21	19 15	0 40	19 53	0 11	14 14	0 27	8 9	0 54	22 8	0 39	22 39	22 48	22 48	0 7	4 11	
S 4	15 25	20 44	2 17	20 38	1 44	1 41	1 42	12 53	0 20	19 18	0 40	19 53	0 12	14 13	0 27	8 8	0 54	22 8	0 39	22 39	22 47	22 48	0 8	4 11	
S 5	15 44	18 22	3 12	20 9	1 28	2 9	1 43	13 8	0 20	19 21	0 39	19 53	0 12	14 12	0 27	8 8	0 54	22 8	0 38	22 39	22 47	22 47	0 9	4 11	
M 6	16 2	15 10	4 0	19 37	1 10	2 37	1 44	13 22	0 19	19 24	0 39	19 53	0 12	14 12	0 27	8 8	0 54	22 8	0 38	22 39	22 47	22 47	0 10	4 10	
T 7	16 20	11 16	4 38	19 1	0 52	3 5	1 44	13 36	0 19	19 27	0 39	19 53	0 12	14 11	0 27	8 7	0 54	22 8	0 38	22 39	22 46	22 47	0 10	4 10	
W 8	16 37	6 48	5 3	18 22	0 32	3 33	1 45	13 50	0 18	19 30	0 39	19 53	0 12	14 10	0 27	8 7	0 54	22 8	0 38	22 39	22 46	22 46	0 11	4 10	
T 9	16 55	1 53	5 14	17 41	0 11	4 1	1 46	14 3	0 17	19 33	0 39	19 53	0 12	14 9	0 27	8 6	0 54	22 8	0 38	22 39	22 46	22 46	0 12	4 10	
F 10	17 12	3n17	5 8	16 59	0n 9	4 29	1 46	14 17	0 17	19 36	0 39	19 53	0 12	14 8	0 27	8 6	0 54	22 8	0 38	22 39	22 45	22 46	0 13	4 9	
S 11	17 28	8 28	4 44	16 17	0 30	4 57	1 47	14 31	0 16	19 39	0 39	19 53	0 12	14 8	0 27	8 6	0 54	22 8	0 38	22 38	22 45	22 45	0 13	4 9	
S 12	17 45	13 21	4 2	15 36	0 49	5 25	1 47	14 44	0 16	19 42	0 39	19 53	0 12	14 7	0 27	8 5	0 54	22 8	0 38	22 38	22 45	22 45	0 14	4 9	
M13	18 1	17 34	3 3	14 58	1 8	5 53	1 47	14 58	0 15	19 44	0 39	19 53	0 13	14 6	0 27	8 5	0 54	22 8	0 38	22 37	22 44	22 45	0 15	4 8	
T 14	18 17	20 42	1 50	14 23	1 25	6 20	1 47	15 11	0 15	19 47	0 39	19 53	0 13	14 5	0 27	8 4	0 54	22 8	0 37	22 37	22 44	22 44	0 15	4 8	
W15	18 32	22 24	0 29	13 53	1 40	6 48	1 47	15 24	0 14	19 50	0 38	19 53	0 13	14 5	0 27	8 4	0 54	22 8	0 37	22 37	22 44	22 44	0 16	4 8	
T 16	18 47	22 28	0s54	13 28	1 53	7 15	1 47	15 37	0 13	19 53	0 38	19 53	0 13	14 4	0 27	8 4	0 54	22 8	0 37	22 37	22 43	22 44	0 16	4 8	
F 17	19 2	20 56	2 12	13 8	2 4	7 43	1 47	15 50	0 13	19 56	0 38	19 54	0 13	14 3	0 27	8 3	0 54	22 8	0 37	22 37	22 43	22 43	0 17	4 7	
S 18	19 17	18 2	3 20	12 54	2 13	8 10	1 47	16 3	0 12	19 58	0 38	19 54	0 13	14 2	0 27	8 3	0 54	22 8	0 37	22 37	22 43	22 43	0 17	4 7	
S 19	19 31	14 6	4 14	12 45	2 20	8 37	1 47	16 16	0 12	20 1	0 38	19 54	0 13	14 2	0 27	8 3	0 54	22 8	0 37	22 37	22 42	22 43	0 18	4 7	
M20	19 45	9 32	4 52	12 41	2 25	9 4	1 47	16 29	0 11	20 4	0 38	19 54	0 13	14 1	0 27	8 3	0 54	22 8	0 37	22 37	22 42	22 42	0 18	4 7	
T 21	19 58	4 37	5 13	12 42	2 29	9 31	1 46	16 41	0 11	20 6	0 38	19 55	0 14	14 0	0 27	8 2	0 54	22 8	0 37	22 37	22 42	22 42	0 19	4 6	
W22	20 11	0s23	5 16	12 48	2 30	9 57	1 46	16 53	0 10	20 9	0 38	19 55	0 14	14 0	0 27	8 2	0 54	22 8	0 37	22 37	22 41	22 41	0 19	4 6	
T 23	20 24	5 15	5 4	12 57	2 31	10 23	1 45	17 6	0 9	20 12	0 38	19 55	0 14	13 59	0 27	8 2	0 54	22 7	0 36	22 37	22 41	22 41	0 20	4 6	
F 24	20 36	9 49	4 37	13 10	2 30	10 49	1 44	17 18	0 9	20 14	0 38	19 56	0 14	13 58	0 27	8 2	0 54	22 7	0 36	22 37	22 41	22 41	0 20	4 5	
S 25	20 48	13 53	3 58	13 26	2 29	11 15	1 44	17 30	0 8	20 17	0 38	19 56	0 14	13 57	0 27	8 1	0 54	22 7	0 36	22 37	22 40	22 40	0 21	4 5	
S 26	20 59	17 20	3 8	13 44	2 26	11 41	1 43	17 42	0 8	20 20	0 38	19 57	0 14	13 57	0 26	8 1	0 54	22 7	0 36	22 37	22 40	22 40	0 21	4 5	
M27	21 11	20 1	2 11	14 5	2 22	12 6	1 42	17 53	0 7	20 22	0 38	19 57	0 14	13 56	0 26	8 1	0 55	22 7	0 36	22 36	22 40	22 39	0 21	4 4	
T 28	21 21	21 48	1 8	14 27	2 18	12 31	1 41	18 5	0 6	20 25	0 37	19 58	0 14	13 55	0 26	8 1	0 55	22 7	0 36	22 36	22 39	22 39	0 22	4 4	
W29	21 32	22 36	0 3	14 51	2 13	12 56	1 40	18 16	0 6	20 27	0 37	19 58	0 15	13 55	0 26	8 1	0 55	22 7	0 36	22 36	22 39	22 38	0 22	4 4	
T 30	21s42	22s23	1n 2	15s15	2n 8	13s21	1n39	18s28	0n 5	20s30	0n37	19n59	0n15	13n54	0s26	8n 1	0n55	22s 7	0n36	22s36	22s38	22s38	0s22	4n 4	

ASTRODIENST EPHEMERIS for the year 1769  
geocentric

DECEMBER 1769

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 40 27	9♂10'05	7♂51	19♂33	11♂30	23♂42	4♂57	1°R58	8°R21	11♂45	14♂15	14♂51	15♂7	21♂19	19♂38	F 1
S 2	4 44 23	10°11'01	19°40	20°49	12°44	24°24	5°11	1♂56	8♂19	11°46	14°17	14°51	15°3	21°26	19°38	S 2
S 3	4 48 20	11°11'58	1♂36	22°7	13°59	25°6	5°24	1°54	8°17	11°46	14°19	14°52	15°0	21°32	19°38	S 3
M 4	4 52 17	12°12'55	13°40	23°28	15°14	25°48	5°38	1°52	8°15	11°46	14°20	14°52	14°57	21°39	19°39	M 4
T 5	4 56 13	13°13'54	25°57	24°49	16°28	26°31	5°51	1°50	8°14	11°47	14°22	14°52	14°54	21°46	19°39	T 5
W 6	5 0 10	14°14'53	8♂31	26°13	17°43	27°13	6°5	1°47	8°12	11°47	14°24	14°52	14°51	21°52	19°39	W 6
T 7	5 4 6	15°15'52	21°26	27°37	18°58	27°55	6°18	1°45	8°10	11°47	14°26	14°52	14°47	21°59	19°40	T 7
F 8	5 8 3	16°16'52	4♂46	29°3	20°13	28°37	6°31	1°42	8°8	11°47	14°28	14°52	14°44	22°6	19°40	F 8
S 9	5 11 59	17°17'53	18°32	0♂29	21°27	29°20	6°45	1°39	8°6	11°48	14°30	14°53	14°41	22°12	19°40	S 9
S 10	5 15 56	18°18'54	2♂46	1°56	22°42	0♂2	6°58	1°37	8°5	11°48	14°31	14°53	14°38	22°19	19°41	S 10
M 11	5 19 52	19°19'56	17°24	3°24	23°57	0°45	7°11	1°34	8°3	11°48	14°33	14°53	14°35	22°25	19°42	M 11
T 12	5 23 49	20°20'58	2♂23	4°52	25°12	1°27	7°25	1°31	8°1	11°48	14°35	14°54	14°32	22°32	19°42	T 12
W 13	5 27 46	21°22'01	17°35	6°21	26°27	2°10	7°38	1°28	8°0	11°48	14°37	14°R54	14°28	22°39	19°43	W 13
T 14	5 31 42	22°23'05	2♂50	7°51	27°42	2°53	7°51	1°24	7°58	11°R48	14°39	14°53	14°25	22°45	19°44	T 14
F 15	5 35 39	23°24'09	17°59	9°21	28°57	3°35	8°5	1°21	7°56	11°48	14°41	14°53	14°22	22°52	19°44	F 15
S 16	5 39 35	24°25'14	2♂52	10°51	0♂12	4°18	8°18	1°18	7°55	11°48	14°43	14°52	14°19	22°59	19°45	S 16
S 17	5 43 32	25°26'20	17°23	12°21	1°26	5°1	8°31	1°14	7°53	11°48	14°45	14°50	14°16	23°5	19°46	S 17
M 18	5 47 28	26°27'26	1♂27	13°52	2°41	5°43	8°44	1°11	7°52	11°48	14°47	14°49	14°13	23°12	19°47	M 18
T 19	5 51 25	27°28'33	15°3	15°23	3°56	6°26	8°57	1°7	7°51	11°47	14°49	14°48	14°9	23°19	19°48	T 19
W 20	5 55 21	28°29'41	20°13	16°55	5°11	7°9	9°10	1°3	7°49	11°47	14°51	14°D48	14°6	23°25	19°49	W 20
T 21	5 59 18	29°30'50	10♂59	18°27	6°26	7°52	9°24	1°0	7°48	11°47	14°53	14°48	14°3	23°32	19°50	T 21
F 22	6 3 15	0♂31'59	23°25	19°59	7°41	8°35	9°37	0°56	7°47	11°47	14°55	14°49	14°0	23°39	19°52	F 22
S 23	6 7 11	1°33'08	5♂36	21°31	8°57	9°18	9°50	0°52	7°46	11°46	14°57	14°51	13°57	23°45	19°53	S 23
S 24	6 11 8	2°34'19	17°36	23°3	10°12	10°1	10°3	0°48	7°44	11°46	14°59	14°52	13°53	23°52	19°54	S 24
M 25	6 15 4	3°35'29	29°28	24°36	11°27	10°44	10°16	0°44	7°43	11°46	15°1	14°54	13°50	23°59	19°56	M 25
T 26	6 19 1	4°36'40	11♂15	26°9	12°42	11°27	10°28	0°40	7°42	11°45	15°3	14°R54	13°47	24°5	19°57	T 26
W 27	6 22 57	5°37'52	23°2	27°43	13°57	12°10	10°41	0°35	7°41	11°45	15°5	14°54	13°44	24°12	19°58	W 27
T 28	6 26 54	6°39'03	4♂50	29°17	15°12	12°54	10°54	0°31	7°40	11°44	15°7	14°53	13°41	24°18	20°0	T 28
F 29	6 30 51	7°40'15	16°42	0♂51	16°27	13°37	11°7	0°27	7°39	11°44	15°9	14°50	13°38	24°25	20°1	F 29
S 30	6 34 47	8°41'26	28°38	2°25	17°42	14°20	11°20	0°23	7°39	11°43	15°11	14°47	13°34	24°32	20°3	S 30
S 31	6 38 44	9♂42'38	10♂42	4♂0	18♂57	15♂3	11♂32	0♂18	7♂38	11♂43	15♂13	14♂42	13♂31	24♂38	20♂5	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
F 1	21s51	21s10	2n 5	15s41	2n 2	13s45	1n38	18s39	0n 5	20s32	0n37	19n59	0n15	13n53	0s26	8n 0	0n55	22s 7	0n36	22s36	22s38	22s38	0s23	4n 3									
S 2	22 0	19 1	3 2	16 7	1 56	14 9	1 37	18 50	0 4	20 35	0 37	20 0	0 15	13 53	0 26	8 0	0 55	22 7	0 36	22 36	22 38	22 37	0 23	4 3									
S 3	22 9	16 3	3 52	16 33	1 50	14 32	1 35	19 1	0 3	20 37	0 37	20 0	0 15	13 52	0 26	8 0	0 55	22 7	0 35	22 36	22 37	22 37	0 23	4 3									
M 4	22 17	12 23	4 32	17 0	1 43	14 55	1 34	19 11	0 3	20 40	0 37	20 1	0 15	13 52	0 26	8 0	0 55	22 7	0 35	22 37	22 37	22 36	0 23	4 2									
T 5	22 25	8 9	5 1	17 27	1 36	15 18	1 33	19 22	0 2	20 42	0 37	20 2	0 15	13 51	0 26	8 0	0 55	22 7	0 35	22 37	22 37	22 36	0 23	4 2									
W 6	22 32	3 30	5 16	17 53	1 29	15 41	1 31	19 32	0 2	20 45	0 37	20 2	0 16	13 50	0 26	8 0	0 55	22 6	0 35	22 37	22 36	22 35	0 24	4 2									
T 7	22 39	1n27	5 16	18 20	1 21	16 3	1 30	19 42	0 1	20 47	0 37	20 3	0 16	13 50	0 26	8 0	0 55	22 6	0 35	22 37	22 36	22 35	0 24	4 2									
F 8	22 46	6 28	4 59	18 46	1 14	16 24	1 28	19 52	0 0	20 49	0 37	20 4	0 16	13 49	0 26	8 0	0 55	22 6	0 35	22 37	22 36	22 34	0 24	4 1									
S 9	22 52	11 21	4 25	19 11	1 7	16 45	1 27	20 2	0s 0	20 52	0 37	20 4	0 16	13 49	0 26	8 0	0 55	22 6	0 35	22 37	22 35	22 34	0 24	4 1									
S 10	22 57	15 47	3 34	19 36	0 59	17 6	1 25	20 12	0 1	20 54	0 37	20 5	0 16	13 48	0 26	8 0	0 55	22 6	0 35	22 37	22 35	22 33	0 24	4 1									
M 11	23 2	19 24	2 27	20 1	0 52	17 26	1 23	20 21	0 2	20 56	0 37	20 6	0 16	13 48	0 26	8 0	0 55	22 6	0 35	22 37	22 35	22 33	0 24	4 0									
T 12	23 7	21 48	1 9	20 25	0 44	17 46	1 21	20 31	0 2	20 58	0 37	20 7	0 16	13 47	0 26	8 0	0 55	22 6	0 35	22 37	22 34	22 32	0 24	4 0									
W 13	23 11	22 38	0s15	20 48	0 37	18 6	1 19	20 40	0 3	21 1	0 36	20 8	0 16	13 47	0 26	8 0	0 55	22 6	0 34	22 37	22 34	22 32	0 24	4 0									
T 14	23 15	21 48	1 38	21 10	0 29	18 25	1 18	20 49	0 3	21 3	0 36	20 8	0 17	13 46	0 26	8 0	0 55	22 6	0 34	22 37	22 33	22 31	0 24	4 0									
F 15	23 18	19 23	2 54	21 31	0 22	18 43	1 16	20 58	0 4	21 5	0 36	20 9	0 17	13 46	0 26	8 0	0 55	22 5	0 34	22 37	22 33	22 31	0 24	3 59									
S 16	23 21	15 42	3 56	21 52	0 14	19 1	1 14	21 6	0 5	21 7	0 36	20 10	0 17	13 45	0 26	8 0	0 55	22 5	0 34	22 36	22 33	22 30	0 24	3 59									
S 17	23 23	11 10	4 42	22 11	0 7	19 18	1 12	21 15	0 5	21 9	0 36	20 11	0 17	13 45	0 26	8 0	0 55	22 5	0 34	22 36	22 32	22 30	0 24	3 59									
M 18	23 25	6 10	5 9	22 30	0s 0	19 35	1 9	21 23	0 6	21 11	0 36	20 12	0 17	13 44	0 26	8 0	0 55	22 5	0 34	22 36	22 32	22 29	0 24	3 58									
T 19	23 27	1 1	5 17	22 47	0 7	19 52	1 7	21 31	0 7	21 13	0 36	20 13	0 17	13 44	0 26	8 0	0 55	22 5	0 34	22 36	22 32	22 29	0 24	3 58									
W 20	23 28	4s 1	5 9	23 3	0 14	20 7	1 5	21 39	0 7	21 15	0 36	20 14	0 17	13 44	0 26	8 0	0 55	22 5	0 34	22 36	22 31	22 28	0 23	3 58									
T 21	23 28	8 43	4 45	23 19	0 21	20 23	1 3	21 47	0 8	21 17	0 36	20 15	0 17	13 43	0 26	8 0	0 56	22 5	0 34	22 36	22 31	22 28	0 23	3 58									
F 22	23 28	12 57	4 8	23 33	0 28	20 37	1 1	21 54	0 8	21 19	0 36	20 16	0 18	13 43	0 26	8 1	0 56	22 5	0 34	22 36	22 30	22 27	0 23	3 57									
S 23	23 28	16 34	3 21	23 46	0 34	20 51	0 58	22 1	0 9	21 21	0 36	20 17	0 18	13 42	0 26	8 1	0 56	22 5	0 33	22 36	22 30	22 27	0 23	3 57									
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