

SWISS EPHEMERIS for the year 2068  
heliocentric

JANUARY 2068

00:00 UT

| Day  | Sid.t   | Terra                  | ☾                   | ♃                   | ♄                   | ♅                   | ♆                   | ♁                   | ♂                   | ♆                  | ♁                  | ♂                   |
|------|---------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|
| S 1  | 6 41 59 | 10 <sup>h</sup> 22'11" | 10 <sup>h</sup> 29' | 19 <sup>h</sup> 25' | 13 <sup>h</sup> 37' | 2 <sup>h</sup> 11'  | 23 <sup>h</sup> 21' | 18 <sup>h</sup> 20' | 10 <sup>h</sup> 52' | 5 <sup>h</sup> 09' | 0 <sup>h</sup> 24' | 26 <sup>h</sup> 38' |
| M 2  | 6 45 56 | 11 <sup>h</sup> 23'22" | 11 <sup>h</sup> 29' | 23 <sup>h</sup> 53' | 15 <sup>h</sup> 12' | 2 <sup>h</sup> 39'  | 23 <sup>h</sup> 26' | 18 <sup>h</sup> 22' | 10 <sup>h</sup> 53' | 5 <sup>h</sup> 09' | 0 <sup>h</sup> 24' | 26 <sup>h</sup> 39' |
| T 3  | 6 49 52 | 12 <sup>h</sup> 24'33" | 12 <sup>h</sup> 29' | 28 <sup>h</sup> 30' | 16 <sup>h</sup> 48' | 3 <sup>h</sup> 11'  | 23 <sup>h</sup> 31' | 18 <sup>h</sup> 24' | 10 <sup>h</sup> 54' | 5 <sup>h</sup> 09' | 0 <sup>h</sup> 24' | 26 <sup>h</sup> 39' |
| W 4  | 6 53 49 | 13 <sup>h</sup> 25'44" | 13 <sup>h</sup> 28' | 3 <sup>h</sup> 15'  | 18 <sup>h</sup> 24' | 3 <sup>h</sup> 44'  | 23 <sup>h</sup> 36' | 18 <sup>h</sup> 26' | 10 <sup>h</sup> 54' | 5 <sup>h</sup> 10' | 0 <sup>h</sup> 24' | 26 <sup>h</sup> 40' |
| T 5  | 6 57 45 | 14 <sup>h</sup> 26'55" | 14 <sup>h</sup> 27' | 8 <sup>h</sup> 09'  | 19 <sup>h</sup> 59' | 4 <sup>h</sup> 16'  | 23 <sup>h</sup> 41' | 18 <sup>h</sup> 28' | 10 <sup>h</sup> 55' | 5 <sup>h</sup> 10' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 40' |
| F 6  | 7 1 42  | 15 <sup>h</sup> 28'06" | 15 <sup>h</sup> 26' | 13 <sup>h</sup> 13' | 21 <sup>h</sup> 35' | 4 <sup>h</sup> 48'  | 23 <sup>h</sup> 46' | 18 <sup>h</sup> 31' | 10 <sup>h</sup> 56' | 5 <sup>h</sup> 11' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 41' |
| S 7  | 7 5 38  | 16 <sup>h</sup> 29'17" | 16 <sup>h</sup> 26' | 18 <sup>h</sup> 25' | 23 <sup>h</sup> 11' | 5 <sup>h</sup> 20'  | 23 <sup>h</sup> 52' | 18 <sup>h</sup> 33' | 10 <sup>h</sup> 57' | 5 <sup>h</sup> 11' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 41' |
| S 8  | 7 9 35  | 17 <sup>h</sup> 30'27" | 17 <sup>h</sup> 25' | 23 <sup>h</sup> 47' | 24 <sup>h</sup> 47' | 5 <sup>h</sup> 52'  | 23 <sup>h</sup> 57' | 18 <sup>h</sup> 35' | 10 <sup>h</sup> 57' | 5 <sup>h</sup> 11' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 42' |
| M 9  | 7 13 32 | 18 <sup>h</sup> 31'38" | 18 <sup>h</sup> 25' | 29 <sup>h</sup> 17' | 26 <sup>h</sup> 22' | 6 <sup>h</sup> 24'  | 24 <sup>h</sup> 02' | 18 <sup>h</sup> 37' | 10 <sup>h</sup> 58' | 5 <sup>h</sup> 12' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 43' |
| T 10 | 7 17 28 | 19 <sup>h</sup> 32'47" | 19 <sup>h</sup> 25' | 4 <sup>h</sup> 56'  | 27 <sup>h</sup> 58' | 6 <sup>h</sup> 56'  | 24 <sup>h</sup> 07' | 18 <sup>h</sup> 39' | 10 <sup>h</sup> 59' | 5 <sup>h</sup> 12' | 0 <sup>h</sup> 25' | 26 <sup>h</sup> 43' |
| W 11 | 7 21 25 | 20 <sup>h</sup> 33'57" | 20 <sup>h</sup> 25' | 10 <sup>h</sup> 44' | 29 <sup>h</sup> 34' | 7 <sup>h</sup> 28'  | 24 <sup>h</sup> 12' | 18 <sup>h</sup> 41' | 11 <sup>h</sup> 00' | 5 <sup>h</sup> 12' | 0 <sup>h</sup> 26' | 26 <sup>h</sup> 44' |
| T 12 | 7 25 21 | 21 <sup>h</sup> 35'06" | 21 <sup>h</sup> 26' | 16 <sup>h</sup> 39' | 1 <sup>h</sup> 10'  | 7 <sup>h</sup> 59'  | 24 <sup>h</sup> 17' | 18 <sup>h</sup> 43' | 11 <sup>h</sup> 00' | 5 <sup>h</sup> 13' | 0 <sup>h</sup> 26' | 26 <sup>h</sup> 44' |
| F 13 | 7 29 18 | 22 <sup>h</sup> 36'14" | 22 <sup>h</sup> 28' | 22 <sup>h</sup> 41' | 2 <sup>h</sup> 46'  | 8 <sup>h</sup> 31'  | 24 <sup>h</sup> 22' | 18 <sup>h</sup> 45' | 11 <sup>h</sup> 01' | 5 <sup>h</sup> 13' | 0 <sup>h</sup> 26' | 26 <sup>h</sup> 45' |
| S 14 | 7 33 14 | 23 <sup>h</sup> 37'21" | 23 <sup>h</sup> 29' | 28 <sup>h</sup> 49' | 4 <sup>h</sup> 22'  | 9 <sup>h</sup> 03'  | 24 <sup>h</sup> 27' | 18 <sup>h</sup> 47' | 11 <sup>h</sup> 02' | 5 <sup>h</sup> 13' | 0 <sup>h</sup> 26' | 26 <sup>h</sup> 46' |
| S 15 | 7 37 11 | 24 <sup>h</sup> 38'29" | 24 <sup>h</sup> 32' | 5 <sup>h</sup> 11'  | 5 <sup>h</sup> 58'  | 9 <sup>h</sup> 35'  | 24 <sup>h</sup> 32' | 18 <sup>h</sup> 49' | 11 <sup>h</sup> 02' | 5 <sup>h</sup> 14' | 0 <sup>h</sup> 26' | 26 <sup>h</sup> 46' |
| M 16 | 7 41 07 | 25 <sup>h</sup> 39'35" | 25 <sup>h</sup> 34' | 11 <sup>h</sup> 19' | 7 <sup>h</sup> 34'  | 10 <sup>h</sup> 06' | 24 <sup>h</sup> 37' | 18 <sup>h</sup> 51' | 11 <sup>h</sup> 03' | 5 <sup>h</sup> 14' | 0 <sup>h</sup> 27' | 26 <sup>h</sup> 47' |
| T 17 | 7 45 04 | 26 <sup>h</sup> 40'41" | 26 <sup>h</sup> 36' | 17 <sup>h</sup> 37' | 9 <sup>h</sup> 10'  | 10 <sup>h</sup> 38' | 24 <sup>h</sup> 42' | 18 <sup>h</sup> 53' | 11 <sup>h</sup> 04' | 5 <sup>h</sup> 15' | 0 <sup>h</sup> 27' | 26 <sup>h</sup> 47' |
| W 18 | 7 49 01 | 27 <sup>h</sup> 41'46" | 27 <sup>h</sup> 39' | 23 <sup>h</sup> 57' | 10 <sup>h</sup> 46' | 11 <sup>h</sup> 09' | 24 <sup>h</sup> 47' | 18 <sup>h</sup> 55' | 11 <sup>h</sup> 05' | 5 <sup>h</sup> 15' | 0 <sup>h</sup> 27' | 26 <sup>h</sup> 48' |
| T 19 | 7 52 57 | 28 <sup>h</sup> 42'51" | 28 <sup>h</sup> 42' | 0 <sup>h</sup> 51'  | 12 <sup>h</sup> 22' | 11 <sup>h</sup> 41' | 24 <sup>h</sup> 53' | 18 <sup>h</sup> 57' | 11 <sup>h</sup> 05' | 5 <sup>h</sup> 15' | 0 <sup>h</sup> 27' | 26 <sup>h</sup> 49' |
| F 20 | 7 56 54 | 29 <sup>h</sup> 43'55" | 29 <sup>h</sup> 45' | 6 <sup>h</sup> 31'  | 13 <sup>h</sup> 58' | 12 <sup>h</sup> 12' | 24 <sup>h</sup> 58' | 19 <sup>h</sup> 00' | 11 <sup>h</sup> 06' | 5 <sup>h</sup> 16' | 0 <sup>h</sup> 27' | 26 <sup>h</sup> 49' |
| S 21 | 8 0 50  | 0 <sup>h</sup> 44'59"  | 0 <sup>h</sup> 48'  | 12 <sup>h</sup> 44' | 15 <sup>h</sup> 34' | 12 <sup>h</sup> 43' | 25 <sup>h</sup> 03' | 19 <sup>h</sup> 02' | 11 <sup>h</sup> 07' | 5 <sup>h</sup> 16' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 50' |
| S 22 | 8 4 47  | 1 <sup>h</sup> 46'01"  | 1 <sup>h</sup> 50'  | 18 <sup>h</sup> 51' | 17 <sup>h</sup> 10' | 13 <sup>h</sup> 15' | 25 <sup>h</sup> 08' | 19 <sup>h</sup> 04' | 11 <sup>h</sup> 07' | 5 <sup>h</sup> 16' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 50' |
| M 23 | 8 8 43  | 2 <sup>h</sup> 47'04"  | 2 <sup>h</sup> 53'  | 24 <sup>h</sup> 52' | 18 <sup>h</sup> 46' | 13 <sup>h</sup> 46' | 25 <sup>h</sup> 13' | 19 <sup>h</sup> 06' | 11 <sup>h</sup> 08' | 5 <sup>h</sup> 17' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 51' |
| T 24 | 8 12 40 | 3 <sup>h</sup> 48'06"  | 3 <sup>h</sup> 55'  | 0 <sup>h</sup> 46'  | 20 <sup>h</sup> 22' | 14 <sup>h</sup> 17' | 25 <sup>h</sup> 18' | 19 <sup>h</sup> 08' | 11 <sup>h</sup> 09' | 5 <sup>h</sup> 17' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 51' |
| W 25 | 8 16 36 | 4 <sup>h</sup> 49'07"  | 4 <sup>h</sup> 57'  | 6 <sup>h</sup> 31'  | 21 <sup>h</sup> 59' | 14 <sup>h</sup> 48' | 25 <sup>h</sup> 23' | 19 <sup>h</sup> 10' | 11 <sup>h</sup> 10' | 5 <sup>h</sup> 17' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 52' |
| T 26 | 8 20 33 | 5 <sup>h</sup> 50'08"  | 5 <sup>h</sup> 59'  | 12 <sup>h</sup> 08' | 23 <sup>h</sup> 35' | 15 <sup>h</sup> 19' | 25 <sup>h</sup> 28' | 19 <sup>h</sup> 12' | 11 <sup>h</sup> 10' | 5 <sup>h</sup> 18' | 0 <sup>h</sup> 28' | 26 <sup>h</sup> 53' |
| F 27 | 8 24 30 | 6 <sup>h</sup> 51'08"  | 7 <sup>h</sup> 00'  | 17 <sup>h</sup> 36' | 25 <sup>h</sup> 11' | 15 <sup>h</sup> 50' | 25 <sup>h</sup> 33' | 19 <sup>h</sup> 14' | 11 <sup>h</sup> 11' | 5 <sup>h</sup> 18' | 0 <sup>h</sup> 29' | 26 <sup>h</sup> 53' |
| S 28 | 8 28 26 | 7 <sup>h</sup> 52'08"  | 8 <sup>h</sup> 01'  | 22 <sup>h</sup> 53' | 26 <sup>h</sup> 48' | 16 <sup>h</sup> 21' | 25 <sup>h</sup> 38' | 19 <sup>h</sup> 16' | 11 <sup>h</sup> 12' | 5 <sup>h</sup> 19' | 0 <sup>h</sup> 29' | 26 <sup>h</sup> 54' |
| S 29 | 8 32 23 | 8 <sup>h</sup> 53'07"  | 9 <sup>h</sup> 02'  | 28 <sup>h</sup> 02' | 0 <sup>h</sup> 24'  | 16 <sup>h</sup> 52' | 25 <sup>h</sup> 43' | 19 <sup>h</sup> 18' | 11 <sup>h</sup> 13' | 5 <sup>h</sup> 19' | 0 <sup>h</sup> 29' | 26 <sup>h</sup> 54' |
| M 30 | 8 36 19 | 9 <sup>h</sup> 54'06"  | 10 <sup>h</sup> 02' | 3 <sup>h</sup> 11'  | 0 <sup>h</sup> 11'  | 17 <sup>h</sup> 23' | 25 <sup>h</sup> 48' | 19 <sup>h</sup> 20' | 11 <sup>h</sup> 13' | 5 <sup>h</sup> 19' | 0 <sup>h</sup> 29' | 26 <sup>h</sup> 55' |
| T 31 | 8 40 16 | 10 <sup>h</sup> 55'04" | 11 <sup>h</sup> 02' | 7 <sup>h</sup> 11'  | 1 <sup>h</sup> 37'  | 17 <sup>h</sup> 54' | 25 <sup>h</sup> 54' | 19 <sup>h</sup> 22' | 11 <sup>h</sup> 14' | 5 <sup>h</sup> 20' | 0 <sup>h</sup> 29' | 26 <sup>h</sup> 56' |

Delta T = 153.70 sec.

FEBRUARY 2068

00:00 UT

| Day  | Sid.t    | Terra                  | ☾                   | ♃                   | ♄                   | ♅                   | ♆                   | ♁                   | ♂                   | ♆                  | ♁                  | ♂                   |
|------|----------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|
| W 1  | 8 44 12  | 11 <sup>h</sup> 56'01" | 12 <sup>h</sup> 01' | 12 <sup>h</sup> 29' | 3 <sup>h</sup> 11'  | 18 <sup>h</sup> 24' | 25 <sup>h</sup> 59' | 19 <sup>h</sup> 24' | 11 <sup>h</sup> 15' | 5 <sup>h</sup> 20' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 56' |
| T 2  | 8 48 09  | 12 <sup>h</sup> 56'58" | 13 <sup>h</sup> 00' | 17 <sup>h</sup> 00' | 4 <sup>h</sup> 50'  | 18 <sup>h</sup> 55' | 26 <sup>h</sup> 04' | 19 <sup>h</sup> 26' | 11 <sup>h</sup> 15' | 5 <sup>h</sup> 20' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 57' |
| F 3  | 8 52 05  | 13 <sup>h</sup> 57'54" | 13 <sup>h</sup> 59' | 21 <sup>h</sup> 22' | 6 <sup>h</sup> 26'  | 19 <sup>h</sup> 26' | 26 <sup>h</sup> 09' | 19 <sup>h</sup> 29' | 11 <sup>h</sup> 16' | 5 <sup>h</sup> 21' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 57' |
| S 4  | 8 56 02  | 14 <sup>h</sup> 58'48" | 14 <sup>h</sup> 58' | 25 <sup>h</sup> 35' | 8 <sup>h</sup> 03'  | 19 <sup>h</sup> 56' | 26 <sup>h</sup> 14' | 19 <sup>h</sup> 31' | 11 <sup>h</sup> 17' | 5 <sup>h</sup> 21' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 58' |
| S 5  | 8 59 59  | 15 <sup>h</sup> 59'41" | 15 <sup>h</sup> 57' | 29 <sup>h</sup> 41' | 9 <sup>h</sup> 39'  | 20 <sup>h</sup> 27' | 26 <sup>h</sup> 19' | 19 <sup>h</sup> 33' | 11 <sup>h</sup> 18' | 5 <sup>h</sup> 21' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 59' |
| M 6  | 9 3 55   | 17 <sup>h</sup> 00'34" | 16 <sup>h</sup> 56' | 3 <sup>h</sup> 40'  | 11 <sup>h</sup> 16' | 20 <sup>h</sup> 57' | 26 <sup>h</sup> 24' | 19 <sup>h</sup> 35' | 11 <sup>h</sup> 18' | 5 <sup>h</sup> 22' | 0 <sup>h</sup> 30' | 26 <sup>h</sup> 59' |
| T 7  | 9 7 52   | 18 <sup>h</sup> 01'24" | 17 <sup>h</sup> 55' | 7 <sup>h</sup> 31'  | 12 <sup>h</sup> 52' | 21 <sup>h</sup> 28' | 26 <sup>h</sup> 29' | 19 <sup>h</sup> 37' | 11 <sup>h</sup> 19' | 5 <sup>h</sup> 22' | 0 <sup>h</sup> 31' | 27 <sup>h</sup> 00' |
| W 8  | 9 11 48  | 19 <sup>h</sup> 02'14" | 18 <sup>h</sup> 55' | 11 <sup>h</sup> 16' | 14 <sup>h</sup> 29' | 21 <sup>h</sup> 58' | 26 <sup>h</sup> 34' | 19 <sup>h</sup> 39' | 11 <sup>h</sup> 20' | 5 <sup>h</sup> 23' | 0 <sup>h</sup> 31' | 27 <sup>h</sup> 00' |
| T 9  | 9 15 45  | 20 <sup>h</sup> 03'01" | 19 <sup>h</sup> 55' | 14 <sup>h</sup> 55' | 16 <sup>h</sup> 06' | 22 <sup>h</sup> 28' | 26 <sup>h</sup> 39' | 19 <sup>h</sup> 41' | 11 <sup>h</sup> 20' | 5 <sup>h</sup> 23' | 0 <sup>h</sup> 31' | 27 <sup>h</sup> 01' |
| F 10 | 9 19 41  | 21 <sup>h</sup> 03'48" | 20 <sup>h</sup> 55' | 18 <sup>h</sup> 29' | 17 <sup>h</sup> 42' | 22 <sup>h</sup> 59' | 26 <sup>h</sup> 45' | 19 <sup>h</sup> 43' | 11 <sup>h</sup> 21' | 5 <sup>h</sup> 23' | 0 <sup>h</sup> 31' | 27 <sup>h</sup> 01' |
| S 11 | 9 23 38  | 22 <sup>h</sup> 04'32" | 21 <sup>h</sup> 56' | 21 <sup>h</sup> 56' | 19 <sup>h</sup> 19' | 23 <sup>h</sup> 29' | 26 <sup>h</sup> 50' | 19 <sup>h</sup> 45' | 11 <sup>h</sup> 22' | 5 <sup>h</sup> 24' | 0 <sup>h</sup> 31' | 27 <sup>h</sup> 02' |
| S 12 | 9 27 34  | 23 <sup>h</sup> 05'16" | 22 <sup>h</sup> 57' | 25 <sup>h</sup> 19' | 20 <sup>h</sup> 56' | 23 <sup>h</sup> 59' | 26 <sup>h</sup> 55' | 19 <sup>h</sup> 47' | 11 <sup>h</sup> 23' | 5 <sup>h</sup> 24' | 0 <sup>h</sup> 32' | 27 <sup>h</sup> 03' |
| M 13 | 9 31 31  | 24 <sup>h</sup> 05'57" | 23 <sup>h</sup> 58' | 28 <sup>h</sup> 38' | 22 <sup>h</sup> 33' | 24 <sup>h</sup> 29' | 27 <sup>h</sup> 00' | 19 <sup>h</sup> 49' | 11 <sup>h</sup> 23' | 5 <sup>h</sup> 24' | 0 <sup>h</sup> 32' | 27 <sup>h</sup> 03' |
| T 14 | 9 35 28  | 25 <sup>h</sup> 06'37" | 25 <sup>h</sup> 00' | 1 <sup>h</sup> 15'  | 24 <sup>h</sup> 09' | 24 <sup>h</sup> 59' | 27 <sup>h</sup> 05' | 19 <sup>h</sup> 51' | 11 <sup>h</sup> 24' | 5 <sup>h</sup> 25' | 0 <sup>h</sup> 32' | 27 <sup>h</sup> 04' |
| W 15 | 9 39 24  | 26 <sup>h</sup> 07'16" | 26 <sup>h</sup> 02' | 5 <sup>h</sup> 02'  | 25 <sup>h</sup> 46' | 25 <sup>h</sup> 29' | 27 <sup>h</sup> 10' | 19 <sup>h</sup> 53' | 11 <sup>h</sup> 25' | 5 <sup>h</sup> 25' | 0 <sup>h</sup> 32' | 27 <sup>h</sup> 04' |
| T 16 | 9 43 21  | 27 <sup>h</sup> 07'52" | 27 <sup>h</sup> 04' | 8 <sup>h</sup> 09'  | 27 <sup>h</sup> 23' | 25 <sup>h</sup> 59' | 27 <sup>h</sup> 15' | 19 <sup>h</sup> 55' | 11 <sup>h</sup> 26' | 5 <sup>h</sup> 25' | 0 <sup>h</sup> 32' | 27 <sup>h</sup> 05' |
| F 17 | 9 47 17  | 28 <sup>h</sup> 08'28" | 28 <sup>h</sup> 06' | 11 <sup>h</sup> 13' | 29 <sup>h</sup> 00' | 26 <sup>h</sup> 29' | 27 <sup>h</sup> 20' | 19 <sup>h</sup> 58' | 11 <sup>h</sup> 26' | 5 <sup>h</sup> 26' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 06' |
| S 18 | 9 51 14  | 29 <sup>h</sup> 09'01" | 29 <sup>h</sup> 09' | 14 <sup>h</sup> 13' | 0 <sup>h</sup> 37'  | 26 <sup>h</sup> 59' | 27 <sup>h</sup> 25' | 20 <sup>h</sup> 00' | 11 <sup>h</sup> 27' | 5 <sup>h</sup> 26' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 06' |
| S 19 | 9 55 10  | 0 <sup>h</sup> 11'33"  | 0 <sup>h</sup> 11'  | 17 <sup>h</sup> 11' | 2 <sup>h</sup> 14'  | 27 <sup>h</sup> 29' | 27 <sup>h</sup> 30' | 20 <sup>h</sup> 02' | 11 <sup>h</sup> 28' | 5 <sup>h</sup> 27' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 07' |
| M 20 | 9 59 07  | 1 <sup>h</sup> 12'04"  | 1 <sup>h</sup> 13'  | 20 <sup>h</sup> 07' | 3 <sup>h</sup> 51'  | 27 <sup>h</sup> 59' | 27 <sup>h</sup> 36' | 20 <sup>h</sup> 04' | 11 <sup>h</sup> 28' | 5 <sup>h</sup> 27' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 07' |
| T 21 | 10 03 03 | 2 <sup>h</sup> 12'33"  | 2 <sup>h</sup> 15'  | 23 <sup>h</sup> 00' | 5 <sup>h</sup> 28'  | 28 <sup>h</sup> 29' | 27 <sup>h</sup> 41' | 20 <sup>h</sup> 06' | 11 <sup>h</sup> 29' | 5 <sup>h</sup> 27' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 08' |
| W 22 | 10 07 00 | 3 <sup>h</sup> 13'01"  | 3 <sup>h</sup> 17'  | 25 <sup>h</sup> 52' | 7 <sup>h</sup> 05'  | 28 <sup>h</sup> 58' | 27 <sup>h</sup> 46' | 20 <sup>h</sup> 08' | 11 <sup>h</sup> 30' | 5 <sup>h</sup> 28' | 0 <sup>h</sup> 33' | 27 <sup>h</sup> 09' |
| T 23 | 10 10 57 | 4 <sup>h</sup> 13'27"  | 4 <sup>h</sup> 19'  | 28 <sup>h</sup> 42' | 8 <sup>h</sup> 42'  | 29 <sup>h</sup> 28' | 27 <sup>h</sup> 51' | 20 <sup>h</sup> 10' | 11 <sup>h</sup> 31' | 5 <sup>h</sup> 28' | 0 <sup>h</sup> 34' | 27 <sup>h</sup> 09' |
| F 24 | 10 14 53 | 5 <sup>h</sup> 13'52"  | 5 <sup>h</sup> 20'  | 1 <sup>h</sup> 30'  | 10 <sup>h</sup> 19' | 29 <sup>h</sup> 58' | 27 <sup>h</sup> 56' | 20 <sup>h</sup> 12' | 11 <sup>h</sup> 31' | 5 <sup>h</sup> 28' | 0 <sup>h</sup> 34' | 27 <sup>h</sup> 10' |
| S 25 | 10 18 50 | 6 <sup>h</sup> 14'15"  | 6 <sup>h</sup> 21'  | 4 <sup>h</sup> 18'  | 11 <sup>h</sup> 56' | 0 <sup>h</sup> 27'  | 28 <sup>h</sup> 01' | 20 <sup>h</sup> 14' | 11 <sup>h</sup> 32' | 5 <sup>h</sup> 29' | 0 <sup>h</sup> 34' | 27 <sup>h</sup> 10' |
| S 26 | 10 22 46 | 7 <sup>h</sup> 14'38"  | 7 <sup>h</sup> 22'  | 7 <sup>h</sup> 04'  | 13 <sup>h</sup> 33' | 0 <sup>h</sup> 57'  | 28 <sup>h</sup> 06' | 20 <sup>h</sup> 16' | 11 <sup>h</sup> 33' | 5 <sup>h</sup> 29' | 0 <sup>h</sup> 34' | 27 <sup>h</sup> 11' |
| M 27 | 10 26 43 | 8 <sup>h</sup> 15'58"  | 8 <sup>h</sup> 22'  | 9 <sup>h</sup> 50'  | 15 <sup>h</sup> 11' | 1 <sup>h</sup> 26'  | 28 <sup>h</sup> 11' | 20 <sup>h</sup> 18' | 11 <sup>h</sup> 33' | 5 <sup>h</sup> 29' | 0 <sup>h</sup> 34' | 27 <sup>h</sup> 11' |
| T 28 | 10 30 39 | 9 <sup>h</sup> 17'18"  | 9 <sup>h</sup> 21'  | 12 <sup>h</sup> 35' | 16 <sup>h</sup> 48' | 1 <sup>h</sup> 56'  | 28 <sup>h</sup> 16' | 20 <sup>h</sup> 20' | 11 <sup>h</sup> 34' | 5 <sup>h</sup> 30' | 0 <sup>h</sup> 35' |                     |

SWISS EPHEMERIS for the year 2068  
heliocentric

MARCH 2068

00:00 UT

| Day  | Sid.t    | Terra                 | ☾                  | ♃                   | ♄                  | ♅                  | ♆                  | ♁                  | ♂                  | ♆                 | ♁                 | ♄                  |
|------|----------|-----------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|
| T 1  | 10 38 32 | 11 <sup>h</sup> 13'52 | 11 <sup>h</sup> 20 | 18 <sup>°</sup> 4   | 20 <sup>°</sup> 2  | 2 <sup>°</sup> 55  | 28 <sup>°</sup> 27 | 20 <sup>h</sup> 24 | 11 <sup>h</sup> 36 | 5 <sup>°</sup> 31 | 0 <sup>°</sup> 35 | 27 <sup>h</sup> 13 |
| F 2  | 10 42 29 | 12 <sup>°</sup> 14'07 | 12 <sup>°</sup> 18 | 20 <sup>°</sup> 49  | 21 <sup>°</sup> 40 | 3 <sup>°</sup> 24  | 28 <sup>°</sup> 32 | 20 <sup>°</sup> 26 | 11 <sup>°</sup> 36 | 5 <sup>°</sup> 31 | 0 <sup>°</sup> 35 | 27 <sup>°</sup> 14 |
| S 3  | 10 46 26 | 13 <sup>°</sup> 14'21 | 13 <sup>°</sup> 16 | 23 <sup>°</sup> 34  | 23 <sup>°</sup> 17 | 3 <sup>°</sup> 53  | 28 <sup>°</sup> 37 | 20 <sup>°</sup> 29 | 11 <sup>°</sup> 37 | 5 <sup>°</sup> 31 | 0 <sup>°</sup> 35 | 27 <sup>°</sup> 14 |
| S 4  | 10 50 22 | 14 <sup>°</sup> 14'32 | 14 <sup>°</sup> 15 | 26 <sup>°</sup> 19  | 24 <sup>°</sup> 54 | 4 <sup>°</sup> 22  | 28 <sup>°</sup> 42 | 20 <sup>°</sup> 31 | 11 <sup>°</sup> 38 | 5 <sup>°</sup> 32 | 0 <sup>°</sup> 35 | 27 <sup>°</sup> 15 |
| M 5  | 10 54 19 | 15 <sup>°</sup> 14'42 | 15 <sup>°</sup> 13 | 29 <sup>°</sup> 6   | 26 <sup>°</sup> 32 | 4 <sup>°</sup> 52  | 28 <sup>°</sup> 47 | 20 <sup>°</sup> 33 | 11 <sup>°</sup> 38 | 5 <sup>°</sup> 32 | 0 <sup>°</sup> 36 | 27 <sup>°</sup> 16 |
| T 6  | 10 58 15 | 16 <sup>°</sup> 14'49 | 16 <sup>°</sup> 11 | 1 <sup>h</sup> 3'53 | 28 <sup>°</sup> 9  | 5 <sup>°</sup> 21  | 28 <sup>°</sup> 52 | 20 <sup>°</sup> 35 | 11 <sup>°</sup> 39 | 5 <sup>°</sup> 32 | 0 <sup>°</sup> 36 | 27 <sup>°</sup> 16 |
| W 7  | 11 2 12  | 17 <sup>°</sup> 14'55 | 17 <sup>°</sup> 9  | 4 <sup>°</sup> 41   | 29 <sup>°</sup> 46 | 5 <sup>°</sup> 50  | 28 <sup>°</sup> 57 | 20 <sup>°</sup> 37 | 11 <sup>°</sup> 40 | 5 <sup>°</sup> 33 | 0 <sup>°</sup> 36 | 27 <sup>°</sup> 17 |
| T 8  | 11 6 8   | 18 <sup>°</sup> 14'59 | 18 <sup>°</sup> 8  | 7 <sup>°</sup> 30   | 1 <sup>h</sup> 24  | 6 <sup>°</sup> 19  | 29 <sup>°</sup> 2  | 20 <sup>°</sup> 39 | 11 <sup>°</sup> 41 | 5 <sup>°</sup> 33 | 0 <sup>°</sup> 36 | 27 <sup>°</sup> 17 |
| F 9  | 11 10 5  | 19 <sup>°</sup> 15'00 | 19 <sup>°</sup> 7  | 10 <sup>°</sup> 21  | 3 <sup>°</sup> 1   | 6 <sup>°</sup> 48  | 29 <sup>°</sup> 8  | 20 <sup>°</sup> 41 | 11 <sup>°</sup> 41 | 5 <sup>°</sup> 33 | 0 <sup>°</sup> 36 | 27 <sup>°</sup> 18 |
| S 10 | 11 14 1  | 20 <sup>°</sup> 15'00 | 20 <sup>°</sup> 6  | 13 <sup>°</sup> 14  | 4 <sup>°</sup> 39  | 7 <sup>°</sup> 17  | 29 <sup>°</sup> 13 | 20 <sup>°</sup> 43 | 11 <sup>°</sup> 42 | 5 <sup>°</sup> 34 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 19 |
| S 11 | 11 17 58 | 21 <sup>°</sup> 14'57 | 21 <sup>°</sup> 6  | 16 <sup>°</sup> 9   | 6 <sup>°</sup> 16  | 7 <sup>°</sup> 46  | 29 <sup>°</sup> 18 | 20 <sup>°</sup> 45 | 11 <sup>°</sup> 43 | 5 <sup>°</sup> 34 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 19 |
| M12  | 11 21 54 | 22 <sup>°</sup> 14'52 | 22 <sup>°</sup> 6  | 19 <sup>°</sup> 6   | 7 <sup>°</sup> 53  | 8 <sup>°</sup> 15  | 29 <sup>°</sup> 23 | 20 <sup>°</sup> 47 | 11 <sup>°</sup> 44 | 5 <sup>°</sup> 35 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 20 |
| T 13 | 11 25 51 | 23 <sup>°</sup> 14'45 | 23 <sup>°</sup> 6  | 22 <sup>°</sup> 6   | 9 <sup>°</sup> 31  | 8 <sup>°</sup> 44  | 29 <sup>°</sup> 28 | 20 <sup>°</sup> 49 | 11 <sup>°</sup> 44 | 5 <sup>°</sup> 35 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 20 |
| W14  | 11 29 48 | 24 <sup>°</sup> 14'36 | 24 <sup>°</sup> 7  | 25 <sup>°</sup> 8   | 11 <sup>°</sup> 8  | 9 <sup>°</sup> 12  | 29 <sup>°</sup> 33 | 20 <sup>°</sup> 51 | 11 <sup>°</sup> 45 | 5 <sup>°</sup> 35 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 21 |
| T 15 | 11 33 44 | 25 <sup>°</sup> 14'24 | 25 <sup>°</sup> 8  | 28 <sup>°</sup> 13  | 12 <sup>°</sup> 46 | 9 <sup>°</sup> 41  | 29 <sup>°</sup> 38 | 20 <sup>°</sup> 53 | 11 <sup>°</sup> 46 | 5 <sup>°</sup> 36 | 0 <sup>°</sup> 37 | 27 <sup>°</sup> 21 |
| F 16 | 11 37 41 | 26 <sup>°</sup> 14'10 | 26 <sup>°</sup> 9  | 1 <sup>h</sup> 22   | 14 <sup>°</sup> 23 | 10 <sup>°</sup> 10 | 29 <sup>°</sup> 43 | 20 <sup>°</sup> 55 | 11 <sup>°</sup> 46 | 5 <sup>°</sup> 36 | 0 <sup>°</sup> 38 | 27 <sup>°</sup> 22 |
| S 17 | 11 41 37 | 27 <sup>°</sup> 13'54 | 27 <sup>°</sup> 11 | 4 <sup>°</sup> 34   | 16 <sup>°</sup> 1  | 10 <sup>°</sup> 39 | 29 <sup>°</sup> 49 | 20 <sup>°</sup> 57 | 11 <sup>°</sup> 47 | 5 <sup>°</sup> 36 | 0 <sup>°</sup> 38 | 27 <sup>°</sup> 23 |
| S 18 | 11 45 34 | 28 <sup>°</sup> 13'36 | 28 <sup>°</sup> 12 | 7 <sup>°</sup> 50   | 17 <sup>°</sup> 38 | 11 <sup>°</sup> 7  | 29 <sup>°</sup> 54 | 21 <sup>°</sup> 0  | 11 <sup>°</sup> 48 | 5 <sup>°</sup> 37 | 0 <sup>°</sup> 38 | 27 <sup>°</sup> 23 |
| M19  | 11 49 30 | 29 <sup>°</sup> 13'16 | 29 <sup>°</sup> 13 | 11 <sup>°</sup> 10  | 19 <sup>°</sup> 16 | 11 <sup>°</sup> 36 | 29 <sup>°</sup> 59 | 21 <sup>°</sup> 2  | 11 <sup>°</sup> 49 | 5 <sup>°</sup> 37 | 0 <sup>°</sup> 38 | 27 <sup>°</sup> 24 |
| T 20 | 11 53 27 | 0 <sup>h</sup> 12'54  | 0 <sup>h</sup> 15  | 14 <sup>°</sup> 34  | 20 <sup>°</sup> 53 | 12 <sup>°</sup> 4  | 0 <sup>h</sup> 4   | 21 <sup>°</sup> 4  | 11 <sup>°</sup> 49 | 5 <sup>°</sup> 37 | 0 <sup>°</sup> 38 | 27 <sup>°</sup> 24 |
| W21  | 11 57 23 | 1 <sup>°</sup> 12'30  | 1 <sup>°</sup> 16  | 18 <sup>°</sup> 3   | 22 <sup>°</sup> 31 | 12 <sup>°</sup> 33 | 0 <sup>°</sup> 9   | 21 <sup>°</sup> 6  | 11 <sup>°</sup> 50 | 5 <sup>°</sup> 38 | 0 <sup>°</sup> 39 | 27 <sup>°</sup> 25 |
| T 22 | 12 1 20  | 2 <sup>°</sup> 12'04  | 2 <sup>°</sup> 17  | 21 <sup>°</sup> 38  | 24 <sup>°</sup> 8  | 13 <sup>°</sup> 2  | 0 <sup>°</sup> 14  | 21 <sup>°</sup> 8  | 11 <sup>°</sup> 51 | 5 <sup>°</sup> 38 | 0 <sup>°</sup> 39 | 27 <sup>°</sup> 26 |
| F 23 | 12 5 17  | 3 <sup>°</sup> 11'37  | 3 <sup>°</sup> 18  | 25 <sup>°</sup> 18  | 25 <sup>°</sup> 46 | 13 <sup>°</sup> 30 | 0 <sup>°</sup> 19  | 21 <sup>°</sup> 10 | 11 <sup>°</sup> 51 | 5 <sup>°</sup> 39 | 0 <sup>°</sup> 39 | 27 <sup>°</sup> 26 |
| S 24 | 12 9 13  | 4 <sup>°</sup> 11'07  | 4 <sup>°</sup> 19  | 29 <sup>°</sup> 4   | 27 <sup>°</sup> 24 | 13 <sup>°</sup> 58 | 0 <sup>°</sup> 24  | 21 <sup>°</sup> 12 | 11 <sup>°</sup> 52 | 5 <sup>°</sup> 39 | 0 <sup>°</sup> 39 | 27 <sup>°</sup> 27 |
| S 25 | 12 13 10 | 5 <sup>°</sup> 10'36  | 5 <sup>°</sup> 19  | 2 <sup>h</sup> 56   | 29 <sup>°</sup> 1  | 14 <sup>°</sup> 27 | 0 <sup>°</sup> 30  | 21 <sup>°</sup> 14 | 11 <sup>°</sup> 53 | 5 <sup>°</sup> 39 | 0 <sup>°</sup> 39 | 27 <sup>°</sup> 27 |
| M26  | 12 17 6  | 6 <sup>°</sup> 10'03  | 6 <sup>°</sup> 19  | 6 <sup>°</sup> 54   | 0 <sup>h</sup> 39  | 14 <sup>°</sup> 55 | 0 <sup>°</sup> 35  | 21 <sup>°</sup> 16 | 11 <sup>°</sup> 54 | 5 <sup>°</sup> 40 | 0 <sup>°</sup> 40 | 27 <sup>°</sup> 28 |
| T 27 | 12 21 3  | 7 <sup>°</sup> 9'28   | 7 <sup>°</sup> 18  | 11 <sup>°</sup> 0   | 2 <sup>°</sup> 16  | 15 <sup>°</sup> 24 | 0 <sup>°</sup> 40  | 21 <sup>°</sup> 18 | 11 <sup>°</sup> 54 | 5 <sup>°</sup> 40 | 0 <sup>°</sup> 40 | 27 <sup>°</sup> 28 |
| W28  | 12 24 59 | 8 <sup>°</sup> 8'52   | 8 <sup>°</sup> 17  | 15 <sup>°</sup> 12  | 3 <sup>°</sup> 54  | 15 <sup>°</sup> 52 | 0 <sup>°</sup> 45  | 21 <sup>°</sup> 20 | 11 <sup>°</sup> 55 | 5 <sup>°</sup> 40 | 0 <sup>°</sup> 40 | 27 <sup>°</sup> 29 |
| T 29 | 12 28 56 | 9 <sup>°</sup> 8'13   | 9 <sup>°</sup> 16  | 19 <sup>°</sup> 33  | 5 <sup>°</sup> 31  | 16 <sup>°</sup> 20 | 0 <sup>°</sup> 50  | 21 <sup>°</sup> 22 | 11 <sup>°</sup> 56 | 5 <sup>°</sup> 41 | 0 <sup>°</sup> 40 | 27 <sup>°</sup> 30 |
| F 30 | 12 32 52 | 10 <sup>°</sup> 7'33  | 10 <sup>°</sup> 14 | 24 <sup>°</sup> 2   | 7 <sup>°</sup> 9   | 16 <sup>°</sup> 48 | 0 <sup>°</sup> 55  | 21 <sup>°</sup> 24 | 11 <sup>°</sup> 57 | 5 <sup>°</sup> 41 | 0 <sup>°</sup> 40 | 27 <sup>°</sup> 30 |
| S 31 | 12 36 49 | 11 <sup>h</sup> 6'51  | 11 <sup>h</sup> 11 | 28 <sup>h</sup> 39  | 8 <sup>h</sup> 46  | 17 <sup>h</sup> 16 | 1 <sup>h</sup> 0   | 21 <sup>h</sup> 26 | 11 <sup>h</sup> 57 | 5 <sup>h</sup> 41 | 0 <sup>h</sup> 40 | 27 <sup>h</sup> 31 |

Delta T = 154.01 sec.

APRIL 2068

00:00 UT

| Day  | Sid.t    | Terra                 | ☾                  | ♃                  | ♄                    | ♅                  | ♆                 | ♁                  | ♂                  | ♆                 | ♁                 | ♄                  |
|------|----------|-----------------------|--------------------|--------------------|----------------------|--------------------|-------------------|--------------------|--------------------|-------------------|-------------------|--------------------|
| S 1  | 12 40 46 | 12 <sup>h</sup> 6'08  | 12 <sup>h</sup> 9  | 3 <sup>h</sup> 24  | 10 <sup>h</sup> 24   | 17 <sup>h</sup> 45 | 1 <sup>h</sup> 6  | 21 <sup>h</sup> 28 | 11 <sup>h</sup> 58 | 5 <sup>h</sup> 42 | 0 <sup>h</sup> 41 | 27 <sup>h</sup> 31 |
| M 2  | 12 44 42 | 13 <sup>°</sup> 5'22  | 13 <sup>°</sup> 6  | 8 <sup>°</sup> 19  | 12 <sup>°</sup> 1    | 18 <sup>°</sup> 13 | 1 <sup>°</sup> 11 | 21 <sup>°</sup> 30 | 11 <sup>°</sup> 59 | 5 <sup>°</sup> 42 | 0 <sup>°</sup> 41 | 27 <sup>°</sup> 32 |
| T 3  | 12 48 39 | 14 <sup>°</sup> 4'34  | 14 <sup>°</sup> 3  | 13 <sup>°</sup> 22 | 13 <sup>°</sup> 38   | 18 <sup>°</sup> 41 | 1 <sup>°</sup> 16 | 21 <sup>°</sup> 33 | 11 <sup>°</sup> 59 | 5 <sup>°</sup> 43 | 0 <sup>°</sup> 41 | 27 <sup>°</sup> 33 |
| W 4  | 12 52 35 | 15 <sup>°</sup> 3'44  | 15 <sup>°</sup> 1  | 18 <sup>°</sup> 35 | 15 <sup>°</sup> 16   | 19 <sup>°</sup> 9  | 1 <sup>°</sup> 21 | 21 <sup>°</sup> 35 | 12 <sup>°</sup> 0  | 5 <sup>°</sup> 43 | 0 <sup>°</sup> 41 | 27 <sup>°</sup> 33 |
| T 5  | 12 56 32 | 16 <sup>°</sup> 2'52  | 15 <sup>°</sup> 58 | 23 <sup>°</sup> 57 | 16 <sup>°</sup> 53   | 19 <sup>°</sup> 37 | 1 <sup>°</sup> 26 | 21 <sup>°</sup> 37 | 12 <sup>°</sup> 1  | 5 <sup>°</sup> 43 | 0 <sup>°</sup> 41 | 27 <sup>°</sup> 34 |
| F 6  | 13 0 28  | 17 <sup>°</sup> 1'58  | 16 <sup>°</sup> 55 | 29 <sup>°</sup> 28 | 18 <sup>°</sup> 31   | 20 <sup>°</sup> 5  | 1 <sup>°</sup> 31 | 21 <sup>°</sup> 39 | 12 <sup>°</sup> 2  | 5 <sup>°</sup> 44 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 34 |
| S 7  | 13 4 25  | 18 <sup>°</sup> 1'02  | 17 <sup>°</sup> 53 | 5 <sup>h</sup> 7   | 20 <sup>°</sup> 8    | 20 <sup>°</sup> 33 | 1 <sup>°</sup> 36 | 21 <sup>°</sup> 41 | 12 <sup>°</sup> 2  | 5 <sup>°</sup> 44 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 35 |
| S 8  | 13 8 21  | 19 <sup>°</sup> 0'03  | 18 <sup>°</sup> 52 | 10 <sup>°</sup> 55 | 21 <sup>°</sup> 45   | 21 <sup>°</sup> 1  | 1 <sup>°</sup> 41 | 21 <sup>°</sup> 43 | 12 <sup>°</sup> 3  | 5 <sup>°</sup> 44 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 36 |
| M 9  | 13 12 18 | 19 <sup>°</sup> 59'02 | 19 <sup>°</sup> 50 | 16 <sup>°</sup> 50 | 23 <sup>°</sup> 23   | 21 <sup>°</sup> 28 | 1 <sup>°</sup> 47 | 21 <sup>°</sup> 45 | 12 <sup>°</sup> 4  | 5 <sup>°</sup> 45 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 36 |
| T 10 | 13 16 15 | 20 <sup>°</sup> 57'59 | 20 <sup>°</sup> 49 | 22 <sup>°</sup> 53 | 25 <sup>°</sup> 0    | 21 <sup>°</sup> 56 | 1 <sup>°</sup> 52 | 21 <sup>°</sup> 47 | 12 <sup>°</sup> 4  | 5 <sup>°</sup> 45 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 37 |
| W11  | 13 20 11 | 21 <sup>°</sup> 56'53 | 21 <sup>°</sup> 48 | 29 <sup>°</sup> 1  | 26 <sup>°</sup> 37   | 22 <sup>°</sup> 24 | 1 <sup>°</sup> 57 | 21 <sup>°</sup> 49 | 12 <sup>°</sup> 5  | 5 <sup>°</sup> 45 | 0 <sup>°</sup> 42 | 27 <sup>°</sup> 37 |
| T 12 | 13 24 8  | 22 <sup>°</sup> 55'45 | 22 <sup>°</sup> 48 | 5 <sup>h</sup> 14  | 28 <sup>°</sup> 14   | 22 <sup>°</sup> 52 | 2 <sup>°</sup> 2  | 21 <sup>°</sup> 51 | 12 <sup>°</sup> 6  | 5 <sup>°</sup> 46 | 0 <sup>°</sup> 43 | 27 <sup>°</sup> 38 |
| F 13 | 13 28 4  | 23 <sup>°</sup> 54'35 | 23 <sup>°</sup> 47 | 11 <sup>°</sup> 30 | 29 <sup>°</sup> 51   | 23 <sup>°</sup> 20 | 2 <sup>°</sup> 7  | 21 <sup>°</sup> 53 | 12 <sup>°</sup> 7  | 5 <sup>°</sup> 46 | 0 <sup>°</sup> 43 | 27 <sup>°</sup> 38 |
| S 14 | 13 32 1  | 24 <sup>°</sup> 53'23 | 24 <sup>°</sup> 47 | 17 <sup>°</sup> 49 | 1 <sup>h</sup> 29    | 23 <sup>°</sup> 47 | 2 <sup>°</sup> 12 | 21 <sup>°</sup> 55 | 12 <sup>°</sup> 7  | 5 <sup>°</sup> 47 | 0 <sup>°</sup> 43 | 27 <sup>°</sup> 39 |
| S 15 | 13 35 57 | 25 <sup>°</sup> 52'08 | 25 <sup>°</sup> 48 | 24 <sup>°</sup> 8  | 3 <sup>°</sup> 6     | 24 <sup>°</sup> 15 | 2 <sup>°</sup> 17 | 21 <sup>°</sup> 57 | 12 <sup>°</sup> 8  | 5 <sup>°</sup> 47 | 0 <sup>°</sup> 43 | 27 <sup>°</sup> 40 |
| M16  | 13 39 54 | 26 <sup>°</sup> 50'52 | 26 <sup>°</sup> 48 | 0 <sup>h</sup> 27  | 4 <sup>°</sup> 43    | 24 <sup>°</sup> 43 | 2 <sup>°</sup> 23 | 21 <sup>°</sup> 59 | 12 <sup>°</sup> 9  | 5 <sup>°</sup> 47 | 0 <sup>°</sup> 43 | 27 <sup>°</sup> 40 |
| T 17 | 13 43 50 | 27 <sup>°</sup> 49'33 | 27 <sup>°</sup> 48 | 6 <sup>°</sup> 43  | 6 <sup>°</sup> 20    | 25 <sup>°</sup> 10 | 2 <sup>°</sup> 28 | 22 <sup>°</sup> 1  | 12 <sup>°</sup> 9  | 5 <sup>°</sup> 48 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 41 |
| W18  | 13 47 47 | 28 <sup>°</sup> 48'12 | 28 <sup>°</sup> 49 | 12 <sup>°</sup> 55 | 7 <sup>°</sup> 57    | 25 <sup>°</sup> 38 | 2 <sup>°</sup> 33 | 22 <sup>°</sup> 3  | 12 <sup>°</sup> 10 | 5 <sup>°</sup> 48 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 41 |
| T 19 | 13 51 43 | 29 <sup>°</sup> 46'50 | 29 <sup>°</sup> 49 | 19 <sup>°</sup> 2  | 9 <sup>°</sup> 34    | 26 <sup>°</sup> 5  | 2 <sup>°</sup> 38 | 22 <sup>°</sup> 6  | 12 <sup>°</sup> 11 | 5 <sup>°</sup> 48 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 42 |
| F 20 | 13 55 40 | 0 <sup>h</sup> 45'25  | 0 <sup>h</sup> 49  | 25 <sup>°</sup> 3  | 11 <sup>°</sup> 11   | 26 <sup>°</sup> 33 | 2 <sup>°</sup> 43 | 22 <sup>°</sup> 8  | 12 <sup>°</sup> 12 | 5 <sup>°</sup> 49 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 43 |
| S 21 | 13 59 37 | 1 <sup>°</sup> 43'59  | 1 <sup>°</sup> 50  | 0 <sup>h</sup> 57  | 12 <sup>°</sup> 48   | 27 <sup>°</sup> 1  | 2 <sup>°</sup> 48 | 22 <sup>°</sup> 10 | 12 <sup>°</sup> 12 | 5 <sup>°</sup> 49 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 43 |
| S 22 | 14 3 33  | 2 <sup>°</sup> 42'31  | 2 <sup>°</sup> 49  | 6 <sup>°</sup> 42  | 14 <sup>°</sup> 25   | 27 <sup>°</sup> 28 | 2 <sup>°</sup> 54 | 22 <sup>°</sup> 12 | 12 <sup>°</sup> 13 | 5 <sup>°</sup> 49 | 0 <sup>°</sup> 44 | 27 <sup>°</sup> 44 |
| M23  | 14 7 30  | 3 <sup>°</sup> 41'02  | 3 <sup>°</sup> 49  | 12 <sup>°</sup> 18 | 16 <sup>°</sup> 1    | 27 <sup>°</sup> 55 | 2 <sup>°</sup> 59 | 22 <sup>°</sup> 14 | 12 <sup>°</sup> 14 | 5 <sup>°</sup> 50 | 0 <sup>°</sup> 45 | 27 <sup>°</sup> 44 |
| T 24 | 14 11 26 | 4 <sup>°</sup> 39'30  | 4 <sup>°</sup> 48  | 17 <sup>°</sup> 46 | 17 <sup>°</sup> 38   | 28 <sup>°</sup> 23 | 3 <sup>°</sup> 4  | 22 <sup>°</sup> 16 | 12 <sup>°</sup> 15 | 5 <sup>°</sup> 50 | 0 <sup>°</sup> 45 | 27 <sup>°</sup> 45 |
| W25  | 14 15 23 | 5 <sup>°</sup> 37'58  | 5 <sup>°</sup> 46  | 23 <sup>°</sup> 3  | 19 <sup>°</sup> 15   | 28 <sup>°</sup> 50 | 3 <sup>°</sup> 9  | 22 <sup>°</sup> 18 | 12 <sup>°</sup> 15 | 5 <sup>°</sup> 51 | 0 <sup>°</sup> 45 | 27 <sup>°</sup> 45 |
| T 26 | 14 19 19 | 6 <sup>°</sup> 36'23  | 6 <sup>°</sup> 45  | 28 <sup>°</sup> 11 | 20 <sup>°</sup> 52   | 29 <sup>°</sup> 18 | 3 <sup>°</sup> 14 | 22 <sup>°</sup> 20 | 12 <sup>°</sup> 16 | 5 <sup>°</sup> 51 | 0 <sup>°</sup> 45 | 27 <sup>°</sup> 46 |
| F 27 | 14 23 16 | 7 <sup>°</sup> 34'47  | 7 <sup>°</sup> 42  | 3 <sup>h</sup> 9   | 22 <sup>°</sup> 28   | 29 <sup>°</sup> 45 | 3 <sup>°</sup> 19 | 22 <sup>°</sup> 22 | 12 <sup>°</sup> 17 | 5 <sup>°</sup> 51 | 0 <sup>°</sup> 45 | 27 <sup>°</sup> 47 |
| S 28 | 14 27 12 | 8 <sup>°</sup> 33'10  | 8 <sup>°</sup> 40  | 7 <sup>°</sup> 58  | 24 <sup>°</sup> 5    | 0 <sup>h</sup> 12  | 3 <sup>°</sup> 24 | 22 <sup>°</sup> 24 | 12 <sup>°</sup> 17 | 5 <sup>°</sup> 52 | 0 <sup>°</sup> 46 | 27 <sup>°</sup> 47 |
| S 29 | 14 31 9  | 9 <sup>°</sup> 31'30  | 9 <sup>°</sup> 37  | 12 <sup>°</sup> 37 | 25 <sup>°</sup> 41</ |                    |                   |                    |                    |                   |                   |                    |

SWISS EPHEMERIS for the year 2068  
heliocentric

MAY 2068

00:00 UT

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

Delta T = 154.32 sec.

JUNE 2068

00:00 UT

| Day  | Sid.t    | Terra    | ☾     | ♃     | ♄     | ♅     | ♆    | ♁     | ♂     | ♆    | ♁    | ♃     |
|------|----------|----------|-------|-------|-------|-------|------|-------|-------|------|------|-------|
| F 1  | 16 41 15 | 11♌21'38 | 11♌20 | 29♌11 | 18♌24 | 15♊27 | 6♌20 | 23♎34 | 12♌42 | 6♌ 4 | 0♈52 | 28♌ 7 |
| S 2  | 16 45 12 | 12°19'09 | 12°16 | 1♌58  | 19°59 | 15°54 | 6°25 | 23°36 | 12°43 | 6° 4 | 0°52 | 28° 8 |
| S 3  | 16 49 8  | 13°16'40 | 13°12 | 4°46  | 21°34 | 16°21 | 6°30 | 23°38 | 12°43 | 6° 5 | 0°52 | 28° 8 |
| M 4  | 16 53 5  | 14°14'09 | 14° 8 | 7°36  | 23°10 | 16°47 | 6°36 | 23°40 | 12°44 | 6° 5 | 0°52 | 28° 9 |
| T 5  | 16 57 2  | 15°11'37 | 15° 4 | 10°27 | 24°45 | 17°14 | 6°41 | 23°42 | 12°45 | 6° 6 | 0°53 | 28° 9 |
| W 6  | 17 0 58  | 16° 9'04 | 16° 1 | 13°20 | 26°20 | 17°40 | 6°46 | 23°44 | 12°45 | 6° 6 | 0°53 | 28°10 |
| T 7  | 17 4 55  | 17° 6'30 | 16°58 | 16°15 | 27°55 | 18° 7 | 6°51 | 23°46 | 12°46 | 6° 6 | 0°53 | 28°11 |
| F 8  | 17 8 51  | 18° 3'54 | 17°55 | 19°12 | 29°30 | 18°33 | 6°56 | 23°48 | 12°47 | 6° 7 | 0°53 | 28°11 |
| S 9  | 17 12 48 | 19° 1'18 | 18°52 | 22°11 | 1♌ 5  | 19° 0 | 7° 2 | 23°50 | 12°48 | 6° 7 | 0°53 | 28°12 |
| S 10 | 17 16 44 | 19°58'40 | 19°50 | 25°14 | 2°40  | 19°26 | 7° 7 | 23°52 | 12°48 | 6° 7 | 0°54 | 28°12 |
| M11  | 17 20 41 | 20°56'01 | 20°49 | 28°19 | 4°15  | 19°53 | 7°12 | 23°55 | 12°49 | 6° 8 | 0°54 | 28°13 |
| T 12 | 17 24 37 | 21°53'22 | 21°47 | 1♌28  | 5°50  | 20°19 | 7°17 | 23°57 | 12°50 | 6° 8 | 0°54 | 28°14 |
| W13  | 17 28 34 | 22°50'41 | 22°46 | 4°40  | 7°25  | 20°46 | 7°22 | 23°59 | 12°51 | 6° 8 | 0°54 | 28°14 |
| T 14 | 17 32 31 | 23°48'00 | 23°45 | 7°56  | 9° 0  | 21°12 | 7°28 | 24° 1 | 12°51 | 6° 9 | 0°54 | 28°15 |
| F 15 | 17 36 27 | 24°45'18 | 24°44 | 11°16 | 10°35 | 21°38 | 7°33 | 24° 3 | 12°52 | 6° 9 | 0°54 | 28°15 |
| S 16 | 17 40 24 | 25°42'35 | 25°43 | 14°41 | 12°10 | 22° 5 | 7°38 | 24° 5 | 12°53 | 6°10 | 0°55 | 28°16 |
| S 17 | 17 44 20 | 26°39'52 | 26°42 | 18°10 | 13°45 | 22°31 | 7°43 | 24° 7 | 12°53 | 6°10 | 0°55 | 28°17 |
| M18  | 17 48 17 | 27°37'08 | 27°41 | 21°45 | 15°19 | 22°58 | 7°48 | 24° 9 | 12°54 | 6°10 | 0°55 | 28°17 |
| T 19 | 17 52 13 | 28°34'24 | 28°40 | 25°25 | 16°54 | 23°24 | 7°53 | 24°11 | 12°55 | 6°11 | 0°55 | 28°18 |
| W20  | 17 56 10 | 29°31'39 | 29°39 | 29°11 | 18°29 | 23°50 | 7°59 | 24°13 | 12°56 | 6°11 | 0°55 | 28°18 |
| T 21 | 18 0 7   | 0♌28'54  | 0♌37  | 3♌ 3  | 20° 4 | 24°17 | 8° 4 | 24°15 | 12°56 | 6°11 | 0°56 | 28°19 |
| F 22 | 18 4 3   | 1°26'09  | 1°34  | 7° 2  | 21°39 | 24°43 | 8° 9 | 24°17 | 12°57 | 6°12 | 0°56 | 28°19 |
| S 23 | 18 8 0   | 2°23'24  | 2°32  | 11° 7 | 23°14 | 25° 9 | 8°14 | 24°19 | 12°58 | 6°12 | 0°56 | 28°20 |
| S 24 | 18 11 56 | 3°20'38  | 3°29  | 15°20 | 24°49 | 25°36 | 8°19 | 24°21 | 12°58 | 6°12 | 0°56 | 28°21 |
| M25  | 18 15 53 | 4°17'53  | 4°25  | 19°41 | 26°24 | 26° 2 | 8°25 | 24°23 | 12°59 | 6°13 | 0°56 | 28°21 |
| T 26 | 18 19 49 | 5°15'08  | 5°21  | 24°10 | 27°58 | 26°28 | 8°30 | 24°25 | 13° 0 | 6°13 | 0°57 | 28°22 |
| W27  | 18 23 46 | 6°12'22  | 6°17  | 28°47 | 29°33 | 26°54 | 8°35 | 24°27 | 13° 1 | 6°14 | 0°57 | 28°22 |
| T 28 | 18 27 42 | 7° 9'37  | 7°13  | 3♈33  | 1♌ 8  | 27°21 | 8°40 | 24°29 | 13° 1 | 6°14 | 0°57 | 28°23 |
| F 29 | 18 31 39 | 8° 6'52  | 8° 8  | 8°28  | 2°43  | 27°47 | 8°45 | 24°32 | 13° 2 | 6°14 | 0°57 | 28°24 |
| S 30 | 18 35 36 | 9♌ 4'06  | 9♌ 3  | 13♈32 | 4♌18  | 28♊13 | 8♌51 | 24♎34 | 13♌ 3 | 6♌15 | 0♈57 | 28♌24 |

Delta T = 154.48 sec.

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SWISS EPHEMERIS for the year 2068  
heliocentric

JULY 2068

00:00 UT

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

Delta T = 154.63 sec.

AUGUST 2068

00:00 UT

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

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SWISS EPHEMERIS for the year 2068  
heliocentric

SEPTEMBER 2068

00:00 UT

| Day  | Sid.t    | Terra                | ☾                 | ♃                  | ♄                  | ♅                  | ♆                  | ♁                  | ♂                  | ♆                 | ♁                 | ♂                  |
|------|----------|----------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|
| S 1  | 22 43 58 | 9 <sup>h</sup> 24'45 | 9 <sup>h</sup> 18 | 10 <sup>h</sup> 32 | 14 <sup>h</sup> 27 | 25 <sup>h</sup> 48 | 14 <sup>h</sup> 20 | 26 <sup>h</sup> 43 | 13 <sup>h</sup> 48 | 6 <sup>h</sup> 38 | 1 <sup>h</sup> 9  | 29 <sup>h</sup> 1  |
| S 2  | 22 47 55 | 10°22'49             | 10°15             | 13°25              | 16° 3              | 26°14              | 14°25              | 26°45              | 13°49              | 6°38              | 1° 9              | 29° 1              |
| M 3  | 22 51 52 | 11°20'55             | 11°12             | 16°20              | 17°39              | 26°41              | 14°30              | 26°47              | 13°50              | 6°38              | 1° 9              | 29° 2              |
| T 4  | 22 55 48 | 12°19'02             | 12°10             | 19°17              | 19°15              | 27° 7              | 14°35              | 26°49              | 13°50              | 6°39              | 1° 9              | 29° 3              |
| W 5  | 22 59 45 | 13°17'10             | 13° 8             | 22°17              | 20°51              | 27°34              | 14°41              | 26°51              | 13°51              | 6°39              | 1°10              | 29° 3              |
| T 6  | 23 3 41  | 14°15'21             | 14° 7             | 25°20              | 22°27              | 28° 0              | 14°46              | 26°53              | 13°52              | 6°39              | 1°10              | 29° 4              |
| F 7  | 23 7 38  | 15°13'32             | 15° 6             | 28°25              | 24° 4              | 28°27              | 14°51              | 26°55              | 13°52              | 6°40              | 1°10              | 29° 4              |
| S 8  | 23 11 34 | 16°11'45             | 16° 5             | 1 <sup>h</sup> 34  | 25°40              | 28°54              | 14°56              | 26°57              | 13°53              | 6°40              | 1°10              | 29° 5              |
| S 9  | 23 15 31 | 17° 9'59             | 17° 5             | 4°46               | 27°16              | 29°20              | 15° 2              | 26°59              | 13°54              | 6°41              | 1°10              | 29° 6              |
| M10  | 23 19 27 | 18° 8'15             | 18° 5             | 8° 2               | 28°53              | 29°47              | 15° 7              | 27° 1              | 13°55              | 6°41              | 1°11              | 29° 6              |
| T 11 | 23 23 24 | 19° 6'33             | 19° 5             | 11°22              | 0 <sup>h</sup> 29  | 0 <sup>h</sup> 13  | 15°12              | 27° 3              | 13°55              | 6°41              | 1°11              | 29° 7              |
| W12  | 23 27 21 | 20° 4'52             | 20° 5             | 14°47              | 2° 6               | 0°40               | 15°17              | 27° 5              | 13°56              | 6°42              | 1°11              | 29° 7              |
| T 13 | 23 31 17 | 21° 3'13             | 21° 6             | 18°17              | 3°42               | 1° 7               | 15°23              | 27° 7              | 13°57              | 6°42              | 1°11              | 29° 8              |
| F 14 | 23 35 14 | 22° 1'36             | 22° 6             | 21°51              | 5°18               | 1°33               | 15°28              | 27° 9              | 13°57              | 6°42              | 1°11              | 29° 8              |
| S 15 | 23 39 10 | 23° 0'01             | 23° 6             | 25°32              | 6°55               | 2° 0               | 15°33              | 27°11              | 13°58              | 6°43              | 1°11              | 29° 9              |
| S 16 | 23 43 7  | 23°58'29             | 24° 6             | 29°18              | 8°31               | 2°27               | 15°38              | 27°13              | 13°59              | 6°43              | 1°12              | 29°10              |
| M17  | 23 47 3  | 24°56'58             | 25° 5             | 3 <sup>h</sup> 10  | 10° 8              | 2°53               | 15°44              | 27°15              | 14° 0              | 6°43              | 1°12              | 29°10              |
| T 18 | 23 51 0  | 25°55'30             | 26° 4             | 7° 9               | 11°45              | 3°20               | 15°49              | 27°17              | 14° 0              | 6°44              | 1°12              | 29°11              |
| W19  | 23 54 56 | 26°54'04             | 27° 3             | 11°15              | 13°21              | 3°47               | 15°54              | 27°19              | 14° 1              | 6°44              | 1°12              | 29°11              |
| T 20 | 23 58 53 | 27°52'40             | 28° 1             | 15°28              | 14°58              | 4°13               | 15°59              | 27°21              | 14° 2              | 6°45              | 1°12              | 29°12              |
| F 21 | 0 2 50   | 28°51'18             | 28°59             | 19°50              | 16°35              | 4°40               | 16° 5              | 27°23              | 14° 2              | 6°45              | 1°13              | 29°13              |
| S 22 | 0 6 46   | 29°49'58             | 29°57             | 24°19              | 18°11              | 5° 7               | 16°10              | 27°25              | 14° 3              | 6°45              | 1°13              | 29°13              |
| S 23 | 0 10 43  | 0 <sup>h</sup> 48'41 | 0 <sup>h</sup> 54 | 28°56              | 19°48              | 5°34               | 16°15              | 27°27              | 14° 4              | 6°46              | 1°13              | 29°14              |
| M24  | 0 14 39  | 1°47'25              | 1°52              | 3 <sup>h</sup> 42  | 21°25              | 6° 1               | 16°20              | 27°29              | 14° 5              | 6°46              | 1°13              | 29°14              |
| T 25 | 0 18 36  | 2°46'12              | 2°49              | 8°37               | 23° 2              | 6°28               | 16°26              | 27°32              | 14° 5              | 6°46              | 1°13              | 29°15              |
| W26  | 0 22 32  | 3°45'00              | 3°46              | 13°41              | 24°38              | 6°54               | 16°31              | 27°34              | 14° 6              | 6°47              | 1°13              | 29°15              |
| T 27 | 0 26 29  | 4°43'51              | 4°43              | 18°55              | 26°15              | 7°21               | 16°36              | 27°36              | 14° 7              | 6°47              | 1°14              | 29°16              |
| F 28 | 0 30 25  | 5°42'44              | 5°40              | 24°17              | 27°52              | 7°48               | 16°41              | 27°38              | 14° 7              | 6°47              | 1°14              | 29°17              |
| S 29 | 0 34 22  | 6°41'38              | 6°37              | 29°48              | 29°29              | 8°15               | 16°47              | 27°40              | 14° 8              | 6°48              | 1°14              | 29°17              |
| S 30 | 0 38 19  | 7 <sup>h</sup> 40'35 | 7 <sup>h</sup> 35 | 5 <sup>h</sup> 28  | 1 <sup>h</sup> 6   | 8 <sup>h</sup> 42  | 16 <sup>h</sup> 52 | 27 <sup>h</sup> 42 | 14 <sup>h</sup> 9  | 6 <sup>h</sup> 48 | 1 <sup>h</sup> 14 | 29 <sup>h</sup> 18 |

Delta T = 154.95 sec.

OCTOBER 2068

00:00 UT

| Day  | Sid.t   | Terra                | ☾                 | ♃                  | ♄                  | ♅                  | ♆                  | ♁                  | ♂                  | ♆                 | ♁                 | ♂                  |
|------|---------|----------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------|
| M 1  | 0 42 15 | 8 <sup>h</sup> 39'33 | 8 <sup>h</sup> 33 | 11 <sup>h</sup> 17 | 2 <sup>h</sup> 43  | 9 <sup>h</sup> 9   | 16 <sup>h</sup> 57 | 27 <sup>h</sup> 44 | 14 <sup>h</sup> 10 | 6 <sup>h</sup> 49 | 1 <sup>h</sup> 14 | 29 <sup>h</sup> 18 |
| T 2  | 0 46 12 | 9°38'33              | 9°31              | 17°12              | 4°20               | 9°36               | 17° 2              | 27°46              | 14°10              | 6°49              | 1°15              | 29°19              |
| W 3  | 0 50 8  | 10°37'35             | 10°29             | 23°15              | 5°57               | 10° 3              | 17° 8              | 27°48              | 14°11              | 6°49              | 1°15              | 29°20              |
| T 4  | 0 54 5  | 11°36'39             | 11°28             | 29°24              | 7°34               | 10°30              | 17°13              | 27°50              | 14°12              | 6°50              | 1°15              | 29°20              |
| F 5  | 0 58 1  | 12°35'45             | 12°27             | 5 <sup>h</sup> 37  | 9°11               | 10°57              | 17°18              | 27°52              | 14°12              | 6°50              | 1°15              | 29°21              |
| S 6  | 1 1 58  | 13°34'52             | 13°27             | 11°54              | 10°48              | 11°24              | 17°24              | 27°54              | 14°13              | 6°50              | 1°15              | 29°21              |
| S 7  | 1 5 54  | 14°34'01             | 14°27             | 18°12              | 12°25              | 11°52              | 17°29              | 27°56              | 14°14              | 6°51              | 1°15              | 29°22              |
| M 8  | 1 9 51  | 15°33'12             | 15°27             | 24°32              | 14° 3              | 12°19              | 17°34              | 27°58              | 14°15              | 6°51              | 1°16              | 29°22              |
| T 9  | 1 13 47 | 16°32'24             | 16°28             | 0 <sup>h</sup> 50  | 15°40              | 12°46              | 17°39              | 28° 0              | 14°15              | 6°51              | 1°16              | 29°23              |
| W10  | 1 17 44 | 17°31'38             | 17°29             | 7° 6               | 17°17              | 13°13              | 17°45              | 28° 2              | 14°16              | 6°52              | 1°16              | 29°24              |
| T 11 | 1 21 41 | 18°30'55             | 18°31             | 13°18              | 18°54              | 13°40              | 17°50              | 28° 4              | 14°17              | 6°52              | 1°16              | 29°24              |
| F 12 | 1 25 37 | 19°30'13             | 19°32             | 19°25              | 20°32              | 14° 8              | 17°55              | 28° 6              | 14°18              | 6°53              | 1°16              | 29°25              |
| S 13 | 1 29 34 | 20°29'33             | 20°33             | 25°25              | 22° 9              | 14°35              | 18° 0              | 28° 8              | 14°18              | 6°53              | 1°17              | 29°25              |
| S 14 | 1 33 30 | 21°28'56             | 21°34             | 1 <sup>h</sup> 18  | 23°46              | 15° 2              | 18° 6              | 28°10              | 14°19              | 6°53              | 1°17              | 29°26              |
| M15  | 1 37 27 | 22°28'21             | 22°35             | 7° 3               | 25°23              | 15°29              | 18°11              | 28°12              | 14°20              | 6°54              | 1°17              | 29°27              |
| T 16 | 1 41 23 | 23°27'48             | 23°36             | 12°39              | 27° 1              | 15°57              | 18°16              | 28°14              | 14°20              | 6°54              | 1°17              | 29°27              |
| W17  | 1 45 20 | 24°27'18             | 24°36             | 18° 5              | 28°38              | 16°24              | 18°21              | 28°16              | 14°21              | 6°54              | 1°17              | 29°28              |
| T 18 | 1 49 16 | 25°26'50             | 25°36             | 23°22              | 0 <sup>h</sup> 16  | 16°52              | 18°27              | 28°18              | 14°22              | 6°55              | 1°18              | 29°28              |
| F 19 | 1 53 13 | 26°26'24             | 26°35             | 28°30              | 1°53               | 17°19              | 18°32              | 28°20              | 14°23              | 6°55              | 1°18              | 29°29              |
| S 20 | 1 57 10 | 27°26'00             | 27°35             | 3 <sup>h</sup> 27  | 3°30               | 17°47              | 18°37              | 28°22              | 14°23              | 6°55              | 1°18              | 29°29              |
| S 21 | 2 1 6   | 28°25'39             | 28°33             | 8°16               | 5° 8               | 18°14              | 18°43              | 28°24              | 14°24              | 6°56              | 1°18              | 29°30              |
| M22  | 2 5 3   | 29°25'19             | 29°32             | 12°54              | 6°45               | 18°42              | 18°48              | 28°27              | 14°25              | 6°56              | 1°18              | 29°31              |
| T 23 | 2 8 59  | 0 <sup>h</sup> 25'02 | 0 <sup>h</sup> 30 | 17°24              | 8°23               | 19° 9              | 18°53              | 28°29              | 14°25              | 6°57              | 1°18              | 29°31              |
| W24  | 2 12 56 | 1°24'47              | 1°29              | 21°46              | 10° 0              | 19°37              | 18°58              | 28°31              | 14°26              | 6°57              | 1°19              | 29°32              |
| T 25 | 2 16 52 | 2°24'35              | 2°27              | 25°59              | 11°38              | 20° 4              | 19° 4              | 28°33              | 14°27              | 6°57              | 1°19              | 29°32              |
| F 26 | 2 20 49 | 3°24'24              | 3°25              | 0 <sup>h</sup> 4   | 13°15              | 20°32              | 19° 9              | 28°35              | 14°28              | 6°58              | 1°19              | 29°33              |
| S 27 | 2 24 45 | 4°24'15              | 4°23              | 4° 2               | 14°53              | 21° 0              | 19°14              | 28°37              | 14°28              | 6°58              | 1°19              | 29°33              |
| S 28 | 2 28 42 | 5°24'08              | 5°21              | 7°53               | 16°30              | 21°27              | 19°20              | 28°39              | 14°29              | 6°58              | 1°19              | 29°34              |
| M29  | 2 32 39 | 6°24'03              | 6°19              | 11°37              | 18° 8              | 21°55              | 19°25              | 28°41              | 14°30              | 6°59              | 1°20              | 29°35              |
| T 30 | 2 36 35 | 7°24'00              | 7°18              | 15°16              | 19°45              | 22°23              | 19°30              | 28°43              | 14°30              | 6°59              | 1°20              | 29°35              |
| W31  | 2 40 32 | 8 <sup>h</sup> 23'59 | 8 <sup>h</sup> 17 | 18 <sup>h</sup> 48 | 21 <sup>h</sup> 23 | 22 <sup>h</sup> 51 | 19 <sup>h</sup> 35 | 28 <sup>h</sup> 45 | 14 <sup>h</sup> 31 | 6 <sup>h</sup> 59 | 1 <sup>h</sup> 20 | 29 <sup>h</sup> 36 |

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SWISS EPHEMERIS for the year 2068  
heliocentric

NOVEMBER 2068

00:00 UT

| Day  | Sid.t   | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆    | ♁    | ♁     |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| T 1  | 2 44 28 | 9♁23'59  | 9♁16  | 22♁16 | 23♁0  | 23♁18 | 19♁41 | 28♁47 | 14♁32 | 7♁0  | 1♁20 | 29♁36 |
| F 2  | 2 48 25 | 10°24'01 | 10°15 | 25°38 | 24°38 | 23°46 | 19°46 | 28°49 | 14°33 | 7°0  | 1°20 | 29°37 |
| S 3  | 2 52 21 | 11°24'04 | 11°15 | 28°56 | 26°16 | 24°14 | 19°51 | 28°51 | 14°33 | 7°1  | 1°20 | 29°38 |
| S 4  | 2 56 18 | 12°24'09 | 12°16 | 2♁10  | 27°53 | 24°42 | 19°57 | 28°53 | 14°34 | 7°1  | 1°21 | 29°38 |
| M 5  | 3 0 14  | 13°24'15 | 13°17 | 5°20  | 29°31 | 25°10 | 20°2  | 28°55 | 14°35 | 7°1  | 1°21 | 29°39 |
| T 6  | 3 4 11  | 14°24'23 | 14°18 | 8°27  | 1♁8   | 25°38 | 20°7  | 28°57 | 14°35 | 7°2  | 1°21 | 29°39 |
| W 7  | 3 8 8   | 15°24'32 | 15°20 | 11°30 | 2°46  | 26°6  | 20°12 | 28°59 | 14°36 | 7°2  | 1°21 | 29°40 |
| T 8  | 3 12 4  | 16°24'43 | 16°22 | 14°30 | 4°23  | 26°34 | 20°18 | 29°1  | 14°37 | 7°2  | 1°21 | 29°40 |
| F 9  | 3 16 1  | 17°24'56 | 17°24 | 17°28 | 6°1   | 27°2  | 20°23 | 29°3  | 14°38 | 7°3  | 1°22 | 29°41 |
| S 10 | 3 19 57 | 18°25'11 | 18°26 | 20°23 | 7°38  | 27°30 | 20°28 | 29°5  | 14°38 | 7°3  | 1°22 | 29°42 |
| S 11 | 3 23 54 | 19°25'27 | 19°28 | 23°17 | 9°16  | 27°59 | 20°34 | 29°7  | 14°39 | 7°3  | 1°22 | 29°42 |
| M12  | 3 27 50 | 20°25'45 | 20°31 | 26°8  | 10°53 | 28°27 | 20°39 | 29°9  | 14°40 | 7°4  | 1°22 | 29°43 |
| T 13 | 3 31 47 | 21°26'05 | 21°32 | 28°58 | 12°31 | 28°55 | 20°44 | 29°11 | 14°40 | 7°4  | 1°22 | 29°43 |
| W14  | 3 35 43 | 22°26'27 | 22°34 | 1♁46  | 14°8  | 29°23 | 20°49 | 29°13 | 14°41 | 7°5  | 1°22 | 29°44 |
| T 15 | 3 39 40 | 23°26'51 | 23°35 | 4°33  | 15°45 | 29°52 | 20°55 | 29°15 | 14°42 | 7°5  | 1°23 | 29°45 |
| F 16 | 3 43 37 | 24°27'16 | 24°36 | 7°20  | 17°23 | 0♁20  | 21°0  | 29°17 | 14°43 | 7°5  | 1°23 | 29°45 |
| S 17 | 3 47 33 | 25°27'44 | 25°37 | 10°5  | 19°0  | 0°48  | 21°5  | 29°19 | 14°43 | 7°6  | 1°23 | 29°46 |
| S 18 | 3 51 30 | 26°28'13 | 26°37 | 12°50 | 20°37 | 1°17  | 21°11 | 29°21 | 14°44 | 7°6  | 1°23 | 29°46 |
| M19  | 3 55 26 | 27°28'44 | 27°37 | 15°35 | 22°15 | 1°45  | 21°16 | 29°23 | 14°45 | 7°6  | 1°23 | 29°47 |
| T 20 | 3 59 23 | 28°29'17 | 28°37 | 18°20 | 23°52 | 2°14  | 21°21 | 29°26 | 14°46 | 7°7  | 1°24 | 29°47 |
| W21  | 4 3 19  | 29°29'51 | 29°36 | 21°5  | 25°29 | 2°42  | 21°26 | 29°28 | 14°46 | 7°7  | 1°24 | 29°48 |
| T 22 | 4 7 16  | 0♁30'28  | 0♁36  | 23°50 | 27°7  | 3°11  | 21°32 | 29°30 | 14°47 | 7°7  | 1°24 | 29°49 |
| F 23 | 4 11 12 | 1°31'06  | 1°35  | 26°35 | 28°44 | 3°39  | 21°37 | 29°32 | 14°48 | 7°8  | 1°24 | 29°49 |
| S 24 | 4 15 9  | 2°31'45  | 2°33  | 29°21 | 0♁21  | 4°8   | 21°42 | 29°34 | 14°48 | 7°8  | 1°24 | 29°50 |
| S 25 | 4 19 6  | 3°32'26  | 3°32  | 2♁9   | 1°58  | 4°37  | 21°48 | 29°36 | 14°49 | 7°9  | 1°25 | 29°50 |
| M26  | 4 23 2  | 4°33'08  | 4°31  | 4°57  | 3°35  | 5°5   | 21°53 | 29°38 | 14°50 | 7°9  | 1°25 | 29°51 |
| T 27 | 4 26 59 | 5°33'52  | 5°30  | 7°47  | 5°12  | 5°34  | 21°58 | 29°40 | 14°51 | 7°9  | 1°25 | 29°52 |
| W28  | 4 30 55 | 6°34'37  | 6°29  | 10°38 | 6°49  | 6°3   | 22°4  | 29°42 | 14°51 | 7°10 | 1°25 | 29°52 |
| T 29 | 4 34 52 | 7°35'23  | 7°29  | 13°31 | 8°26  | 6°32  | 22°9  | 29°44 | 14°52 | 7°10 | 1°25 | 29°53 |
| F 30 | 4 38 48 | 8°36'10  | 8°28  | 16♁26 | 10♁3  | 7♁1   | 22♁14 | 29♁46 | 14♁53 | 7♁10 | 1♁25 | 29♁53 |

Delta T = 155.26 sec.

DECEMBER 2068

00:00 UT

| Day  | Sid.t   | Terra    | ☾     | ♃     | ♄     | ♅     | ♆     | ♁     | ♂     | ♆    | ♁    | ♁     |
|------|---------|----------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| S 1  | 4 42 45 | 9♁36'58  | 9♁29  | 19♁23 | 11♁40 | 7♁30  | 22♁19 | 29♁48 | 14♁53 | 7♁11 | 1♁26 | 29♁54 |
| S 2  | 4 46 41 | 10°37'47 | 10°29 | 22°23 | 13°17 | 7°59  | 22°25 | 29°50 | 14°54 | 7°11 | 1°26 | 29°54 |
| M 3  | 4 50 38 | 11°38'36 | 11°30 | 25°25 | 14°54 | 8°28  | 22°30 | 29°52 | 14°55 | 7°11 | 1°26 | 29°55 |
| T 4  | 4 54 35 | 12°39'27 | 12°32 | 28°31 | 16°31 | 8°57  | 22°35 | 29°54 | 14°56 | 7°12 | 1°26 | 29°56 |
| W 5  | 4 58 31 | 13°40'18 | 13°33 | 1♁40  | 18°8  | 9°26  | 22°41 | 29°56 | 14°56 | 7°12 | 1°26 | 29°56 |
| T 6  | 5 2 28  | 14°41'10 | 14°36 | 4°52  | 19°44 | 9°55  | 22°46 | 29°58 | 14°57 | 7°13 | 1°27 | 29°57 |
| F 7  | 5 6 24  | 15°42'03 | 15°38 | 8°8   | 21°21 | 10°24 | 22°51 | 0♁0   | 14°58 | 7°13 | 1°27 | 29°57 |
| S 8  | 5 10 21 | 16°42'57 | 16°41 | 11°29 | 22°58 | 10°53 | 22°57 | 0°2   | 14°58 | 7°13 | 1°27 | 29°58 |
| S 9  | 5 14 17 | 17°43'52 | 17°44 | 14°54 | 24°34 | 11°23 | 23°2  | 0°4   | 14°59 | 7°14 | 1°27 | 29°58 |
| M10  | 5 18 14 | 18°44'48 | 18°47 | 18°23 | 26°11 | 11°52 | 23°7  | 0°6   | 15°0  | 7°14 | 1°27 | 29°59 |
| T 11 | 5 22 10 | 19°45'44 | 19°50 | 21°58 | 27°48 | 12°21 | 23°13 | 0°8   | 15°1  | 7°14 | 1°27 | 29°59 |
| W12  | 5 26 7  | 20°46'42 | 20°52 | 25°39 | 29°24 | 12°51 | 23°18 | 0°10  | 15°1  | 7°15 | 1°28 | 0♁0   |
| T 13 | 5 30 4  | 21°47'41 | 21°55 | 29°25 | 1♁0   | 13°20 | 23°23 | 0°12  | 15°2  | 7°15 | 1°28 | 0°1   |
| F 14 | 5 34 0  | 22°48'41 | 22°57 | 3♁18  | 2°37  | 13°50 | 23°28 | 0°14  | 15°3  | 7°15 | 1°28 | 0°1   |
| S 15 | 5 37 57 | 23°49'42 | 23°59 | 7°17  | 4°13  | 14°19 | 23°34 | 0°16  | 15°3  | 7°16 | 1°28 | 0°2   |
| S 16 | 5 41 53 | 24°50'43 | 25°0  | 11°23 | 5°49  | 14°49 | 23°39 | 0°18  | 15°4  | 7°16 | 1°28 | 0°3   |
| M17  | 5 45 50 | 25°51'46 | 26°1  | 15°37 | 7°26  | 15°18 | 23°44 | 0°20  | 15°5  | 7°17 | 1°29 | 0°3   |
| T 18 | 5 49 46 | 26°52'50 | 27°2  | 19°58 | 9°2   | 15°48 | 23°50 | 0°22  | 15°6  | 7°17 | 1°29 | 0°4   |
| W19  | 5 53 43 | 27°53'54 | 28°2  | 24°27 | 10°38 | 16°18 | 23°55 | 0°24  | 15°6  | 7°17 | 1°29 | 0°4   |
| T 20 | 5 57 39 | 28°55'00 | 29°2  | 29°5  | 12°14 | 16°47 | 24°0  | 0°26  | 15°7  | 7°18 | 1°29 | 0°5   |
| F 21 | 6 1 36  | 29°56'06 | 0♁2   | 3♁52  | 13°50 | 17°17 | 24°6  | 0°28  | 15°8  | 7°18 | 1°29 | 0°5   |
| S 22 | 6 5 33  | 0♁57'13  | 1°2   | 8°47  | 15°26 | 17°47 | 24°11 | 0°31  | 15°8  | 7°18 | 1°30 | 0°6   |
| S 23 | 6 9 29  | 1°58'20  | 2°1   | 13°51 | 17°2  | 18°17 | 24°16 | 0°33  | 15°9  | 7°19 | 1°30 | 0°7   |
| M24  | 6 13 26 | 2°59'29  | 3°1   | 19°5  | 18°38 | 18°47 | 24°22 | 0°35  | 15°10 | 7°19 | 1°30 | 0°7   |
| T 25 | 6 17 22 | 4°0'37   | 4°0   | 24°27 | 20°14 | 19°17 | 24°27 | 0°37  | 15°11 | 7°19 | 1°30 | 0°8   |
| W26  | 6 21 19 | 5°1'46   | 4°59  | 29°59 | 21°50 | 19°47 | 24°32 | 0°39  | 15°11 | 7°20 | 1°30 | 0°8   |
| T 27 | 6 25 15 | 6°2'56   | 5°58  | 5♁39  | 23°26 | 20°17 | 24°38 | 0°41  | 15°12 | 7°20 | 1°30 | 0°9   |
| F 28 | 6 29 12 | 7°4'05   | 6°58  | 11°28 | 25°2  | 20°47 | 24°43 | 0°43  | 15°13 | 7°21 | 1°31 | 0°10  |
| S 29 | 6 33 9  | 8°5'14   | 7°58  | 17°24 | 26°37 | 21°17 | 24°48 | 0°45  | 15°14 | 7°21 | 1°31 | 0°10  |
| S 30 | 6 37 5  | 9°6'23   | 8°58  | 23°27 | 28°13 | 21°48 | 24°54 | 0°47  | 15°14 | 7°21 | 1°31 | 0°11  |
| M31  | 6 41 2  | 10♁7'33  | 9♁59  | 29♁35 | 29♁49 | 22♁18 | 24♁59 | 0♁49  | 15♁15 | 7♁22 | 1♁31 | 0♁11  |

Delta T = 155.42 sec.

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