

KSIĘŻYC

| d | Wsch. | Kulm. | Zach. | A _w | A _z | α | δ | D | F |
|----------------------|-------|-------|-------|----------------|----------------|-------------------|----------|------|-------|
| | λ=0° | | φ=50° | | | 0 ^h UT | | | |
| WRZESIEŃ 2022 | | | | | | | | | |
| | h m | h m | h m | -° | +° | h m s | ° ' " | ' " | |
| 1 | 11 00 | 15 58 | 20 45 | 67 | 64 | 14 07 31 | -11 47.4 | 31.3 | 0.22 |
| 2 | 12 21 | 16 49 | 21 08 | 59 | 56 | 14 58 34 | -17 05.2 | 31.6 | 0.31 |
| 3 | 13 43 | 17 45 | 21 40 | 51 | 49 | 15 53 18 | -21 36.9 | 31.9 | 0.42 |
| 4 | 15 02 | 18 45 | 22 25 | 46 | 45 | 16 52 07 | -25 00.6 | 32.2 | 0.53 |
| 5 | 16 11 | 19 48 | 23 26 | 44 | 45 | 17 54 34 | -26 54.9 | 32.4 | 0.64 |
| 6 | 17 05 | 20 51 | — | 47 | — | 18 59 07 | -27 03.3 | 32.6 | 0.75 |
| 7 | 17 45 | 21 53 | 0 43 | 52 | 48 | 20 03 33 | -25 20.7 | 32.8 | 0.84 |
| 8 | 18 14 | 22 50 | 2 09 | 60 | 55 | 21 05 44 | -21 55.3 | 32.8 | 0.92 |
| 9 | 18 36 | 23 43 | 3 38 | 70 | 64 | 22 04 27 | -17 07.2 | 32.7 | 0.97 |
| 10 | 18 53 | — | 5 04 | 80 | 74 | 22 59 30 | -11 22.0 | 32.5 | 1.00 |
| 11 | 19 09 | 0 33 | 6 27 | 90 | 85 | 23 51 28 | - 5 06.0 | 32.2 | -0.99 |
| 12 | 19 24 | 1 20 | 7 47 | 100 | 95 | 0 41 17 | 1 16.7 | 31.8 | -0.97 |
| 13 | 19 40 | 2 06 | 9 05 | 109 | 105 | 1 29 58 | 7 26.1 | 31.4 | -0.92 |
| 14 | 19 58 | 2 52 | 10 21 | 117 | 114 | 2 18 30 | 13 05.4 | 30.9 | -0.85 |
| 15 | 20 20 | 3 39 | 11 37 | 125 | 122 | 3 07 39 | 18 01.2 | 30.5 | -0.77 |
| 16 | 20 48 | 4 27 | 12 49 | 130 | 129 | 3 57 57 | 22 02.3 | 30.1 | -0.68 |
| 17 | 21 24 | 5 17 | 13 57 | 134 | 133 | 4 49 34 | 24 59.8 | 29.9 | -0.59 |
| 18 | 22 09 | 6 07 | 14 56 | 135 | 135 | 5 42 18 | 26 46.7 | 29.7 | -0.49 |
| 19 | 23 06 | 6 58 | 15 45 | 134 | 135 | 6 35 34 | 27 18.9 | 29.6 | -0.40 |
| 20 | — | 7 49 | 16 23 | — | 132 | 7 28 35 | 26 35.6 | 29.5 | -0.31 |
| 21 | 0 10 | 8 38 | 16 52 | 130 | 127 | 8 20 36 | 24 39.6 | 29.6 | -0.22 |
| 22 | 1 20 | 9 26 | 17 15 | 124 | 120 | 9 11 05 | 21 36.9 | 29.8 | -0.15 |
| 23 | 2 32 | 10 11 | 17 34 | 117 | 112 | 9 59 53 | 17 35.8 | 30.0 | -0.09 |
| 24 | 3 45 | 10 55 | 17 49 | 109 | 104 | 10 47 13 | 12 46.4 | 30.3 | -0.04 |
| 25 | 4 58 | 11 39 | 18 04 | 99 | 94 | 11 33 36 | 7 19.8 | 30.6 | -0.01 |
| 26 | 6 13 | 12 23 | 18 18 | 90 | 85 | 12 19 45 | 1 28.6 | 30.9 | 0.00 |
| 27 | 7 29 | 13 08 | 18 33 | 80 | 76 | 13 06 33 | - 4 33.3 | 31.1 | 0.01 |
| 28 | 8 47 | 13 55 | 18 50 | 70 | 66 | 13 54 59 | -10 29.7 | 31.4 | 0.05 |
| 29 | 10 09 | 14 46 | 19 12 | 61 | 58 | 14 46 00 | -16 02.6 | 31.7 | 0.11 |
| 30 | 11 32 | 15 41 | 19 41 | 53 | 51 | 15 40 24 | -20 51.2 | 31.9 | 0.19 |

| | | | | | | |
|------------------|-------|---------------------------------|--|-------------------------|---------|-------|
| pierwsza kwadra: | 3 IX | 18 ^h 08 ^m | | 8 IX 10.6 ^h | Saturn | 4°N |
| pełnia: | 10 IX | 9 ^h 59 ^m | | 10 IX 19.0 ^h | Neptun | 3°N |
| ostatnia kwadra: | 17 IX | 21 ^h 52 ^m | | 11 IX 15.3 ^h | Jowisz | 2°N |
| nów: | 25 IX | 21 ^h 55 ^m | | 14 IX 23.0 ^h | Uran | 0.8°S |
| | | | | 17 IX 1.8 ^h | Mars | 4°S |
| perygeum: | 7 IX | 18 ^h 21 ^m | | 25 IX 5.2 ^h | Wenus | 3°S |
| apogeum: | 19 IX | 14 ^h 45 ^m | | 25 IX 8.3 ^h | Merkury | 7°S |