

KSIEŻYC

| d | Wsch. | Kulm. | Zach. | A _w | A _z | α | δ | D | F |
|---------------------|-------|-------|-------|----------------|----------------|-------------------|----------|------|-------|
| | λ=0° | | φ=50° | | | 0 ^h UT | | | |
| STYCZEŃ 2017 | | | | | | | | | |
| | h m | h m | h m | -° | +° | h m s | ° ' " | ' " | |
| 1 | 9 42 | 14 41 | 19 46 | 67 | 69 | 20 54 56 | -15 20.2 | 30.5 | 0.07 |
| 2 | 10 14 | 15 30 | 20 54 | 72 | 75 | 21 46 31 | -12 28.7 | 30.8 | 0.13 |
| 3 | 10 43 | 16 18 | 22 04 | 79 | 82 | 22 37 41 | - 8 58.0 | 31.1 | 0.21 |
| 4 | 11 11 | 17 07 | 23 15 | 85 | 89 | 23 28 41 | - 4 57.4 | 31.4 | 0.31 |
| 5 | 11 38 | 17 57 | — | 92 | — | 0 20 00 | - 0 37.6 | 31.7 | 0.41 |
| 6 | 12 06 | 18 48 | 0 28 | 99 | 96 | 1 12 15 | 3 49.2 | 32.0 | 0.52 |
| 7 | 12 37 | 19 42 | 1 43 | 106 | 103 | 2 06 05 | 8 08.8 | 32.3 | 0.63 |
| 8 | 13 13 | 20 38 | 2 58 | 112 | 110 | 3 02 04 | 12 05.5 | 32.6 | 0.74 |
| 9 | 13 55 | 21 37 | 4 14 | 117 | 115 | 4 00 28 | 15 21.9 | 32.8 | 0.84 |
| 10 | 14 45 | 22 37 | 5 26 | 119 | 119 | 5 01 05 | 17 41.1 | 32.9 | 0.91 |
| 11 | 15 43 | 23 38 | 6 32 | 120 | 120 | 6 03 05 | 18 49.9 | 32.9 | 0.97 |
| 12 | 16 49 | — | 7 29 | 118 | 119 | 7 05 08 | 18 42.0 | 32.7 | 1.00 |
| 13 | 17 59 | 0 37 | 8 17 | 115 | 116 | 8 05 50 | 17 20.2 | 32.4 | -1.00 |
| 14 | 19 11 | 1 33 | 8 56 | 109 | 112 | 9 04 03 | 14 55.3 | 32.0 | -0.97 |
| 15 | 20 21 | 2 26 | 9 29 | 103 | 106 | 9 59 14 | 11 43.0 | 31.6 | -0.92 |
| 16 | 21 30 | 3 15 | 9 58 | 97 | 100 | 10 51 25 | 7 59.7 | 31.1 | -0.85 |
| 17 | 22 36 | 4 02 | 10 24 | 90 | 93 | 11 41 03 | 4 00.5 | 30.7 | -0.77 |
| 18 | 23 40 | 4 47 | 10 48 | 84 | 87 | 12 28 46 | - 0 02.4 | 30.3 | -0.68 |
| 19 | — | 5 31 | 11 12 | — | 81 | 13 15 16 | - 3 59.1 | 29.9 | -0.59 |
| 20 | 0 43 | 6 14 | 11 37 | 78 | 75 | 14 01 18 | - 7 41.6 | 29.7 | -0.49 |
| 21 | 1 44 | 6 58 | 12 04 | 72 | 70 | 14 47 31 | -11 03.1 | 29.6 | -0.40 |
| 22 | 2 45 | 7 42 | 12 35 | 67 | 66 | 15 34 27 | -13 56.9 | 29.5 | -0.31 |
| 23 | 3 43 | 8 28 | 13 09 | 63 | 62 | 16 22 31 | -16 16.6 | 29.6 | -0.23 |
| 24 | 4 40 | 9 16 | 13 50 | 61 | 60 | 17 11 57 | -17 55.5 | 29.7 | -0.15 |
| 25 | 5 33 | 10 05 | 14 37 | 60 | 60 | 18 02 44 | -18 47.4 | 29.9 | -0.09 |
| 26 | 6 21 | 10 55 | 15 30 | 60 | 61 | 18 54 38 | -18 47.3 | 30.1 | -0.04 |
| 27 | 7 05 | 11 45 | 16 30 | 62 | 63 | 19 47 13 | -17 52.5 | 30.4 | -0.01 |
| 28 | 7 43 | 12 36 | 17 35 | 66 | 67 | 20 40 01 | -16 03.3 | 30.7 | -0.00 |
| 29 | 8 17 | 13 26 | 18 43 | 70 | 73 | 21 32 39 | -13 23.4 | 31.0 | 0.01 |
| 30 | 8 47 | 14 16 | 19 54 | 76 | 79 | 22 24 53 | -10 00.2 | 31.2 | 0.04 |
| 31 | 9 16 | 15 05 | 21 06 | 83 | 86 | 23 16 46 | - 6 03.5 | 31.5 | 0.10 |

| | | | | | | | |
|------------------|------|---------------------------------|--|------|-------------------|---------|-------|
| pierwsza kwadra: | 5 l | 19 ^h 47 ^m | | 2 l | 9.4 ^h | Wenus | 2°S |
| pełnia: | 12 l | 11 ^h 34 ^m | | 3 l | 4.3 ^h | Neptun | 0.4°S |
| ostatnia kwadra: | 19 l | 22 ^h 13 ^m | | 3 l | 6.9 ^h | Mars | 0.2°S |
| nów: | 28 l | 0 ^h 07 ^m | | 6 l | 2.2 ^h | Uran | 3°N |
| | | | | 19 l | 5.5 ^h | Jowisz | 3°S |
| perygeum: | 10 l | 6 ^h 01 ^m | | 24 l | 10.3 ^h | Saturn | 4°S |
| apogeum: | 22 l | 0 ^h 13 ^m | | 26 l | 0.8 ^h | Merkury | 4°S |
| | | | | 30 l | 11.3 ^h | Neptun | 0.5°N |
| | | | | 31 l | 21.4 ^h | Wenus | 3°N |