

KSIEŻYC

| d | Wsch. | Kulm. | Zach. | A _w | A _z | α | δ | D | F |
|-------------------------|-------|-------|-------|----------------|----------------|-------------------|----------|------|-------|
| | λ=0° | | φ=50° | | | 0 ^h UT | | | |
| PAŹDZIERNIK 2010 | | | | | | | | | |
| | h m | h m | h m | -° | +° | h m s | ° ' " | ' " | |
| 1 | 22 49 | 6 00 | 14 14 | 124 | 126 | 6 24 52 | 23 26.9 | 31.5 | -0.52 |
| 2 | — | 6 56 | 14 49 | — | 120 | 7 23 02 | 20 59.8 | 32.0 | -0.41 |
| 3 | 0 09 | 7 51 | 15 17 | 117 | 112 | 8 20 23 | 17 14.9 | 32.4 | -0.30 |
| 4 | 1 31 | 8 45 | 15 42 | 109 | 104 | 9 16 36 | 12 23.9 | 32.8 | -0.20 |
| 5 | 2 56 | 9 38 | 16 04 | 99 | 94 | 10 11 50 | 6 43.7 | 33.1 | -0.11 |
| 6 | 4 21 | 10 31 | 16 25 | 89 | 84 | 11 06 36 | 0 35.4 | 33.2 | -0.05 |
| 7 | 5 47 | 11 24 | 16 48 | 79 | 75 | 12 01 37 | - 5 37.1 | 33.2 | -0.01 |
| 8 | 7 13 | 12 19 | 17 13 | 69 | 66 | 12 57 35 | -11 28.5 | 33.1 | 0.00 |
| 9 | 8 37 | 13 15 | 17 44 | 61 | 58 | 13 54 56 | -16 34.4 | 32.8 | 0.02 |
| 10 | 9 58 | 14 13 | 18 22 | 54 | 53 | 14 53 39 | -20 33.8 | 32.4 | 0.07 |
| 11 | 11 10 | 15 10 | 19 08 | 51 | 50 | 15 53 09 | -23 12.0 | 31.9 | 0.14 |
| 12 | 12 10 | 16 07 | 20 04 | 50 | 50 | 16 52 20 | -24 22.9 | 31.4 | 0.22 |
| 13 | 12 58 | 17 01 | 21 08 | 51 | 53 | 17 49 58 | -24 08.8 | 30.9 | 0.32 |
| 14 | 13 35 | 17 51 | 22 14 | 55 | 57 | 18 45 03 | -22 38.6 | 30.4 | 0.41 |
| 15 | 14 03 | 18 39 | 23 22 | 61 | 63 | 19 37 07 | -20 05.0 | 30.1 | 0.51 |
| 16 | 14 26 | 19 23 | — | 67 | — | 20 26 11 | -16 41.3 | 29.8 | 0.61 |
| 17 | 14 46 | 20 05 | 0 30 | 74 | 70 | 21 12 42 | -12 39.8 | 29.6 | 0.70 |
| 18 | 15 03 | 20 46 | 1 36 | 82 | 78 | 21 57 20 | - 8 11.5 | 29.5 | 0.78 |
| 19 | 15 19 | 21 27 | 2 41 | 89 | 85 | 22 40 51 | - 3 26.1 | 29.5 | 0.85 |
| 20 | 15 35 | 22 07 | 3 47 | 97 | 93 | 23 24 05 | 1 27.4 | 29.5 | 0.91 |
| 21 | 15 53 | 22 50 | 4 53 | 105 | 101 | 0 07 50 | 6 19.8 | 29.6 | 0.96 |
| 22 | 16 12 | 23 34 | 6 01 | 112 | 109 | 0 52 54 | 11 01.0 | 29.8 | 0.99 |
| 23 | 16 36 | — | 7 10 | 118 | 116 | 1 39 57 | 15 19.3 | 30.0 | 1.00 |
| 24 | 17 06 | 0 21 | 8 20 | 124 | 122 | 2 29 33 | 19 02.0 | 30.2 | -0.99 |
| 25 | 17 43 | 1 11 | 9 28 | 128 | 127 | 3 21 55 | 21 55.0 | 30.5 | -0.96 |
| 26 | 18 31 | 2 04 | 10 31 | 130 | 129 | 4 16 53 | 23 44.7 | 30.7 | -0.91 |
| 27 | 19 30 | 2 59 | 11 26 | 129 | 129 | 5 13 44 | 24 20.0 | 31.0 | -0.85 |
| 28 | 20 40 | 3 55 | 12 12 | 125 | 127 | 6 11 28 | 23 34.3 | 31.3 | -0.76 |
| 29 | 21 55 | 4 51 | 12 49 | 119 | 122 | 7 08 55 | 21 27.6 | 31.6 | -0.67 |
| 30 | 23 15 | 5 45 | 13 19 | 112 | 115 | 8 05 16 | 18 05.9 | 31.9 | -0.56 |
| 31 | — | 6 37 | 13 44 | — | 107 | 9 00 11 | 13 40.2 | 32.2 | -0.45 |

| | | | | | | |
|------------------|------|---------------------------------|------|-------------------|---------|-----|
| ostatnia kwadra: | 1 X | 3 ^h 52 ^m | 7 X | 11.4 ^h | Merkury | 7°N |
| nów: | 7 X | 18 ^h 44 ^m | 7 X | 14.4 ^h | Saturn | 8°N |
| pierwsza kwadra: | 14 X | 21 ^h 27 ^m | 9 X | 15.9 ^h | Wenus | 3°S |
| pełnia: | 23 X | 1 ^h 37 ^m | 10 X | 1.9 ^h | Mars | 4°N |
| ostatnia kwadra: | 30 X | 12 ^h 46 ^m | 17 X | 22.1 ^h | Neptun | 5°S |
| | | | 20 X | 10.9 ^h | Jowisz | 7°S |
| perygeum: | 6 X | 13 ^h 42 ^m | 20 X | 15.5 ^h | Uran | 6°S |
| apogeum: | 18 X | 18 ^h 19 ^m | | | | |