

KSIĘŻYC

| d | Wsch. | Kulm. | Zach. | A _w | A _z | α | δ | D | F |
|----------------------|-------|-------|-------|----------------|----------------|-------------------|----------|------|-------|
| | λ=0° | | φ=50° | | | 0 ^h UT | | | |
| SIERPIEŃ 2011 | | | | | | | | | |
| | h m | h m | h m | -° | +° | h m s | ° ' " | ' " | |
| 1 | 6 44 | 13 33 | 20 07 | 102 | 97 | 9 42 03 | 8 59.2 | 32.5 | 0.02 |
| 2 | 8 05 | 14 25 | 20 30 | 92 | 88 | 10 35 56 | 3 27.7 | 32.6 | 0.07 |
| 3 | 9 26 | 15 16 | 20 53 | 83 | 79 | 11 29 25 | - 2 16.3 | 32.7 | 0.14 |
| 4 | 10 48 | 16 08 | 21 18 | 74 | 70 | 12 23 11 | - 7 52.1 | 32.6 | 0.23 |
| 5 | 12 08 | 17 02 | 21 46 | 66 | 63 | 13 17 57 | -12 59.3 | 32.5 | 0.34 |
| 6 | 13 27 | 17 58 | 22 21 | 59 | 57 | 14 14 10 | -17 19.3 | 32.3 | 0.45 |
| 7 | 14 41 | 18 54 | 23 04 | 54 | 53 | 15 11 56 | -20 35.9 | 32.0 | 0.56 |
| 8 | 15 46 | 19 52 | — | 52 | — | 16 10 49 | -22 37.0 | 31.8 | 0.67 |
| 9 | 16 41 | 20 48 | 0 03 | 53 | 52 | 17 09 55 | -23 16.2 | 31.5 | 0.77 |
| 10 | 17 25 | 21 43 | 0 58 | 55 | 53 | 18 08 05 | -22 33.8 | 31.2 | 0.85 |
| 11 | 18 00 | 22 35 | 2 06 | 60 | 57 | 19 04 14 | -20 37.2 | 31.0 | 0.92 |
| 12 | 18 28 | 23 23 | 3 17 | 66 | 62 | 19 57 45 | -17 38.3 | 30.7 | 0.97 |
| 13 | 18 51 | — | 4 27 | 73 | 69 | 20 48 28 | -13 51.6 | 30.4 | 0.99 |
| 14 | 19 11 | 0 09 | 5 37 | 81 | 77 | 21 36 40 | - 9 32.1 | 30.2 | -1.00 |
| 15 | 19 30 | 0 52 | 6 45 | 88 | 84 | 22 22 51 | - 4 53.3 | 29.9 | -0.98 |
| 16 | 19 48 | 1 34 | 7 51 | 96 | 92 | 23 07 43 | - 0 07.5 | 29.7 | -0.95 |
| 17 | 20 06 | 2 16 | 8 56 | 103 | 100 | 23 51 59 | 4 34.8 | 29.6 | -0.90 |
| 18 | 20 26 | 2 57 | 10 01 | 110 | 107 | 0 36 23 | 9 03.9 | 29.5 | -0.84 |
| 19 | 20 50 | 3 40 | 11 06 | 116 | 113 | 1 21 37 | 13 11.2 | 29.5 | -0.76 |
| 20 | 21 17 | 4 24 | 12 11 | 121 | 119 | 2 08 17 | 16 47.7 | 29.6 | -0.68 |
| 21 | 21 51 | 5 11 | 13 15 | 125 | 124 | 2 56 53 | 19 44.3 | 29.7 | -0.59 |
| 22 | 22 34 | 6 00 | 14 15 | 127 | 127 | 3 47 42 | 21 51.5 | 30.0 | -0.49 |
| 23 | 23 26 | 6 51 | 15 10 | 127 | 127 | 4 40 43 | 22 59.8 | 30.3 | -0.40 |
| 24 | — | 7 45 | 15 59 | — | 126 | 5 35 34 | 23 00.5 | 30.7 | -0.30 |
| 25 | 0 28 | 8 39 | 16 40 | 125 | 122 | 6 31 35 | 21 47.9 | 31.2 | -0.21 |
| 26 | 1 39 | 9 33 | 17 14 | 120 | 117 | 7 28 01 | 19 20.7 | 31.7 | -0.13 |
| 27 | 2 56 | 10 27 | 17 43 | 114 | 109 | 8 24 14 | 15 43.1 | 32.1 | -0.06 |
| 28 | 4 17 | 11 21 | 18 08 | 106 | 101 | 9 19 51 | 11 05.2 | 32.6 | -0.02 |
| 29 | 5 39 | 12 14 | 18 32 | 97 | 92 | 10 14 55 | 5 43.0 | 32.9 | -0.00 |
| 30 | 7 03 | 13 06 | 18 56 | 87 | 83 | 11 09 47 | - 0 03.7 | 33.1 | 0.01 |
| 31 | 8 27 | 14 00 | 19 21 | 78 | 74 | 12 05 01 | - 5 52.0 | 33.1 | 0.05 |

| | | | | | | |
|------------------|---------|---------------------------------|---------|-------------------|---------|-------|
| pierwsza kwadra: | 6 VIII | 11 ^h 08 ^m | 1 VIII | 11.4 ^h | Merkury | 1.5°N |
| pełnia: | 13 VIII | 18 ^h 57 ^m | 4 VIII | 11.9 ^h | Saturn | 8°N |
| ostatnia kwadra: | 21 VIII | 21 ^h 54 ^m | 14 VIII | 16.3 ^h | Neptun | 6°S |
| nów: | 29 VIII | 3 ^h 04 ^m | 17 VIII | 13.0 ^h | Uran | 6°S |
| | | | 20 VIII | 12.3 ^h | Jowisz | 5°S |
| perygeum: | 2 VIII | 21 ^h 00 ^m | 25 VIII | 13.7 ^h | Mars | 3°N |
| apogeum: | 18 VIII | 16 ^h 24 ^m | 29 VIII | 13.8 ^h | Wenus | 7°N |
| perygeum: | 30 VIII | 17 ^h 36 ^m | 31 VIII | 23.3 ^h | Saturn | 7°N |