

Wschody i zachody Słońca w Krakowie - Styczeń 2020

| Data     | Ws<br>h m | Za<br>h m | Dług.<br>Dnia<br>m m | Dłuższy<br>od<br>Najkrot<br>m m | Krótszy<br>od<br>Najdluz<br>m m | Fazy Księżyca<br>Przew. akt. Słońca<br>(m, s, d, bd) |
|----------|-----------|-----------|----------------------|---------------------------------|---------------------------------|--|
| 1.Sro    | 07 38     | 15 48     | 08 10                | 0 05                            | 8 13                            | m - mala h   |
| 2.Czw    | 07 38     | 15 49     | 08 11                | 0 06                            | 8 12                            | m Ks. w apogeum 03 m                                 |
| 3.Pia    | 07 38     | 15 50     | 08 12                | 0 07                            | 8 11                            | m I kwadra 05 45                                     |
| 4.Sob    | 07 38     | 15 51     | 08 13                | 0 08                            | 8 10                            | m  |
| 5.Nie    | 07 38     | 15 53     | 08 15                | 0 10                            | 8 08                            | m Ziemia w peryhelium                                |
| 6.Pon    | 07 38     | 15 54     | 08 16                | 0 11                            | 8 07                            | m  |
| 7.Wto    | 07 37     | 15 55     | 08 18                | 0 13                            | 8 05                            | m  |
| 8.Sro    | 07 37     | 15 57     | 08 20                | 0 15                            | 8 03                            | m  |
| 9.Czw    | 07 36     | 15 58     | 08 22                | 0 17                            | 8 01                            | m h m  |
| 10.Pia   | 07 36     | 15 59     | 08 23                | 0 18                            | 8 00                            | m Pelnia 20 21                                       |
| Polcien. | zac. Ks.  |           |                      |                                 |                                 |  |
| 11.Sob   | 07 36     | 16 00     | 08 24                | 0 19                            | 7 59                            | m  |
| 12.Nie   | 07 35     | 16 02     | 08 27                | 0 22                            | 7 56                            | m h  |
| 13.Pon   | 07 34     | 16 03     | 08 29                | 0 24                            | 7 54                            | m Ks. w perygeum 21                                  |
| 14.Wto   | 07 34     | 16 05     | 08 31                | 0 26                            | 7 52                            | m  |
| 15.Sro   | 07 33     | 16 06     | 08 33                | 0 28                            | 7 50                            | m  |
| 16.Czw   | 07 32     | 16 08     | 08 36                | 0 31                            | 7 47                            | m h m  |
| 17.Pia   | 07 32     | 16 10     | 08 38                | 0 33                            | 7 45                            | m Ostat.kwadra 13 58                                 |
| 18.Sob   | 07 31     | 16 11     | 08 40                | 0 35                            | 7 43                            | m  |
| 19.Nie   | 07 30     | 16 12     | 08 42                | 0 37                            | 7 41                            | m  |
| 20.Pon   | 07 29     | 16 14     | 08 45                | 0 40                            | 7 38                            | m  |
| 21.Wto   | 07 28     | 16 15     | 08 47                | 0 42                            | 7 36                            | m  |
| 22.Sro   | 07 27     | 16 17     | 08 50                | 0 45                            | 7 33                            | m  |
| 23.Czw   | 07 26     | 16 18     | 08 52                | 0 47                            | 7 31                            | m h m  |
| 24.Pia   | 07 24     | 16 20     | 08 56                | 0 51                            | 7 27                            | m Now 22 42  |
| 25.Sob   | 07 23     | 16 22     | 08 59                | 0 54                            | 7 24                            | m  |
| 26.Nie   | 07 22     | 16 24     | 09 02                | 0 57                            | 7 21                            | m  |
| 27.Pon   | 07 21     | 16 25     | 09 04                | 0 59                            | 7 19                            | m  |
| 28.Wto   | 07 19     | 16 26     | 09 07                | 1 02                            | 7 16                            | m h  |
| 29.Sro   | 07 18     | 16 28     | 09 10                | 1 05                            | 7 13                            | m Ks. w apogeum 22                                   |
| 30.Czw   | 07 17     | 16 30     | 09 13                | 1 08                            | 7 10                            | m  |
| 31.Pia   | 07 16     | 16 32     | 09 16                | 1 11                            | 7 07                            | m  |

Dane wyznaczone na podstawie:

The American Ephemeris and Nautical Almanac \* 2020  
w Staniatkach, dnia 1 grudnia 2019 <Adam Michalec>

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