

Biuletyn Meteorologiczny Meteorological Bulletin

Karkonoska Stacja Meteorologiczna
Uniwersytetu Wrocławskiego
na Szrenicy
1962/3

Wydawca:

ZAKŁAD KLIMATOLOGII I OCHRONY ATMOSFERY
INSTYTUT GEOGRAFII I ROZWOJU REGIONALNEGO
UNIwersYTET WROCLAWSKI

Published by:

DEPARTMENT OF CLIMATOLOGY AND ATMOSPHERE PROTECTION
INSTITUTE OF GEOGRAPHY AND REGIONAL DEVELOPMENT
UNIVERSITY OF WROCLAW



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Zakład Klimatologii i Ochrony Atmosfery
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Uniwersytet Wrocławski
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Położenie obserwatorium (observatory location)

Współrzędne geograficzne (coordinates): 15°30'44"E 50°27'47"N

Wysokość nad poziomem morza (altitude): 1364 m

Czas podawany w biuletynie jest czasem UTC.

UTC time is used in the bulletin.

| Parametr Parameter | Opis | Description |
|--------------------|--|---------------------------------------|
| D | Dzień | Day |
| T | Temperatura powietrza | Air temperature |
| Tmax | Temperatura maksymalna | Maximum temperature |
| Tmin | Temperatura minimalna | Minimum temperature |
| Tmin5 | Temperatura minimalna przy gruncie | Minimum temperature near the ground |
| U | Wilgotność względna | Relative humidity |
| e | Ciśnienie pary wodnej | Vapour pressure |
| P | Ciśnienie atmosferyczne na poziomie stacji | Atmospheric pressure at station level |
| V | Prędkość wiatru | Wind speed |
| α | Kierunek wiatru | Wind direction |
| R | Dobowa suma opadu | Precipitation |
| HS | Wysokość pokrywy śnieżnej | Snow depth |
| SD | Usłonecznienie | Sunshine duration |
| NA | Brak danych | No data |
| m | Średnia dobowa | Daily mean |
| • | Zjawisko nie wystąpiło | Lack of phenomenon |

Tabela 1. Temperatura powietrza (T), wilgotność względna (U) i ciśnienie atmosferyczne (P)
Table 1. Air temperature (T), relative humidity (U) and atmospheric pressure (P)

| D | T [°C] | | | | | | | U [%] | | | | P [hPa] | | | |
|----|--------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|---------|-------|-------|-------|
| | 07 | 12 | 18 | Tm | Tmax | Tmin | Tmin5 | 06 | 12 | 18 | Um | 06 | 12 | 18 | Pm |
| 1 | -5.6 | -4.5 | -5.5 | -5.3 | -2.6 | -6.1 | -10.5 | 91 | 98 | 87 | 92 | 849.7 | 850.0 | 849.1 | 849.6 |
| 2 | -7.0 | -5.6 | -7.5 | -6.9 | -3.9 | -7.9 | -7.9 | 91 | 97 | 97 | 95 | 846.8 | 846.5 | 846.5 | 846.6 |
| 3 | -7.3 | -6.3 | -6.5 | -6.7 | -5.7 | -7.8 | -8.8 | 95 | 96 | 98 | 96 | 845.6 | 846.1 | 845.2 | 845.6 |
| 4 | -5.4 | -0.6 | -1.0 | -2.0 | -0.6 | -7.2 | -7.2 | 99 | 98 | 99 | 99 | 841.0 | 839.6 | 838.7 | 839.8 |
| 5 | 0.0 | 3.6 | 2.9 | 2.4 | 5.6 | -1.4 | -1.4 | 100 | 94 | 96 | 97 | 840.1 | 841.1 | 839.7 | 840.3 |
| 6 | -9.3 | -8.7 | -10.8 | -9.9 | 3.0 | -10.9 | -10.9 | 96 | 97 | 95 | 96 | 842.4 | 848.5 | 855.2 | 848.7 |
| 7 | -12.6 | -10.3 | -9.3 | -10.4 | -9.0 | -13.2 | -13.2 | 97 | 96 | 99 | 97 | 858.4 | 860.9 | 864.3 | 861.2 |
| 8 | -10.6 | -6.7 | -6.3 | -7.5 | -4.5 | -11.6 | -14.1 | 90 | 92 | 51 | 78 | 865.7 | 866.9 | 864.6 | 865.7 |
| 9 | -7.7 | -5.5 | -8.5 | -7.6 | -4.1 | -8.6 | -11.4 | 45 | 67 | 76 | 63 | 861.4 | 855.9 | 855.3 | 857.5 |
| 10 | -6.6 | -1.4 | -3.5 | -3.8 | -0.2 | -9.0 | -9.2 | 81 | 74 | 82 | 79 | 853.7 | 854.3 | 853.9 | 854.0 |
| 11 | 0.9 | 3.4 | 0.5 | 1.3 | 3.9 | -3.7 | -6.3 | 89 | 80 | 90 | 86 | 853.3 | 853.1 | 850.6 | 852.3 |
| 12 | -0.9 | -1.5 | -7.9 | -4.6 | 0.6 | -7.9 | -7.9 | 99 | 99 | 97 | 98 | 846.1 | 843.7 | 842.3 | 844.0 |
| 13 | -14.0 | -13.2 | -15.0 | -14.3 | -7.9 | -15.1 | -15.1 | 94 | 94 | 93 | 94 | 847.1 | 849.8 | 852.7 | 849.9 |
| 14 | -15.2 | -11.4 | -13.8 | -13.6 | -11.2 | -16.3 | -16.3 | 90 | 79 | 84 | 84 | 855.6 | 857.4 | 857.6 | 856.9 |
| 15 | -13.6 | -9.3 | -12.6 | -12.0 | -8.9 | -14.9 | -22.8 | 72 | 58 | 57 | 62 | 856.4 | 856.6 | 857.6 | 856.9 |
| 16 | -14.4 | -12.9 | -13.8 | -13.7 | -12.6 | -15.2 | -16.2 | 93 | 91 | 75 | 86 | 856.8 | 857.3 | 858.5 | 857.5 |
| 17 | -14.0 | -10.6 | -11.6 | -12.0 | -10.0 | -14.7 | -14.9 | 75 | 95 | 84 | 85 | 855.4 | 854.5 | 855.5 | 855.1 |
| 18 | -11.8 | -9.3 | -11.4 | -11.0 | -8.6 | -12.5 | -12.5 | 95 | 96 | 92 | 94 | 855.9 | 859.0 | 859.2 | 858.0 |
| 19 | -11.0 | -6.7 | -10.3 | -9.6 | -5.4 | -12.5 | -16.6 | 77 | 89 | 90 | 85 | 858.7 | 859.3 | 859.3 | 859.1 |
| 20 | -10.0 | -8.6 | -9.3 | -9.3 | -7.7 | -11.1 | -13.8 | 93 | 85 | 91 | 90 | 858.3 | 858.3 | 856.9 | 857.8 |
| 21 | -11.7 | -7.2 | -9.5 | -9.5 | -7.1 | -12.1 | -13.0 | 86 | 78 | 96 | 87 | 854.0 | 853.3 | 852.1 | 853.1 |
| 22 | -11.3 | -8.5 | -10.8 | -10.4 | -8.0 | -12.2 | -16.4 | 95 | 83 | 95 | 91 | 849.2 | 849.4 | 848.5 | 849.0 |
| 23 | -11.8 | -9.5 | -9.8 | -10.2 | -8.4 | -12.3 | -13.2 | 95 | 96 | 96 | 96 | 847.0 | 849.0 | 851.4 | 849.1 |
| 24 | -10.7 | -6.7 | -8.8 | -8.8 | -4.6 | -11.5 | -13.7 | 95 | 77 | 71 | 81 | 853.8 | 857.1 | 859.8 | 856.9 |
| 25 | -8.2 | -5.9 | -8.1 | -7.6 | -4.7 | -10.1 | -21.5 | 97 | 97 | 81 | 92 | 860.7 | 860.9 | 859.5 | 860.4 |
| 26 | -9.3 | -3.4 | -7.1 | -6.7 | -2.6 | -10.9 | -21.0 | 82 | 75 | 68 | 75 | 856.8 | 856.2 | 852.7 | 855.2 |
| 27 | -6.1 | -4.2 | -3.7 | -4.4 | -3.3 | -7.6 | -15.4 | 74 | 98 | 98 | 90 | 848.4 | 847.6 | 846.3 | 847.4 |
| 28 | -4.7 | -4.1 | -5.0 | -4.7 | -3.6 | -5.0 | -5.2 | 97 | 98 | 99 | 98 | 846.2 | 847.7 | 851.0 | 848.3 |
| 29 | -5.7 | -3.9 | -1.7 | -3.2 | -1.5 | -6.9 | -6.8 | 99 | 98 | 98 | 98 | 850.1 | 848.7 | 843.6 | 847.5 |
| 30 | 0.5 | 1.7 | 2.4 | 1.8 | 2.7 | -1.9 | -1.9 | 100 | 100 | 100 | 100 | 842.7 | 843.8 | 840.3 | 842.3 |
| 31 | 2.9 | 1.9 | -3.1 | -0.4 | 3.1 | -3.4 | -3.4 | 100 | 100 | 99 | 100 | 837.1 | 840.9 | 843.3 | 840.4 |

Tabela 2. Prędkość (V) i kierunek (α) wiatru, dobowa suma opadu (R) i wysokość pokrywy śnieżnej (HS)Table 2. Wind speed (V) and direction (α), daily sum of precipitation (R) and snow cover depth (HS)

| D | V [m/s] | | | | α [1-32] | | | R[mm] | HS[cm] |
|----|---------|----|----|------|-----------------|----|----|-------|--------|
| | 06 | 12 | 18 | Vm | 06 | 12 | 18 | | |
| 1 | 7 | 5 | 4 | 5.3 | 6 | 8 | 8 | 0.6 | 98 |
| 2 | 4 | 4 | 3 | 3.7 | 24 | 24 | 18 | 1.0 | 100 |
| 3 | 7 | 9 | 9 | 8.3 | 20 | 20 | 20 | 0.5 | 100 |
| 4 | 11 | 5 | 8 | 8.0 | 20 | 20 | 20 | 10.1 | 100 |
| 5 | 11 | 8 | 5 | 8.0 | 20 | 20 | 4 | 19.6 | 96 |
| 6 | 19 | 12 | 12 | 14.3 | 24 | 32 | 2 | 7.0 | 106 |
| 7 | 16 | 12 | 9 | 12.3 | 4 | 2 | 32 | 0.9 | 108 |
| 8 | 4 | 4 | 20 | 9.3 | 4 | 4 | 12 | • | 106 |
| 9 | 30 | 38 | 35 | 34.3 | 12 | 14 | 14 | • | 98 |
| 10 | 12 | 8 | 20 | 13.3 | 16 | 20 | 20 | • | 95 |
| 11 | 5 | 3 | 5 | 4.3 | 16 | 16 | 2 | 0.4 | 93 |
| 12 | 4 | 11 | 18 | 11.0 | 32 | 28 | 28 | 6.1 | 92 |
| 13 | 15 | 11 | 10 | 12.0 | 30 | 28 | 28 | 0.6 | 103 |
| 14 | 14 | 12 | 16 | 14.0 | 28 | 20 | 20 | 0.0 | 105 |
| 15 | 2 | 3 | 5 | 3.3 | 20 | 8 | 6 | 0.7 | 103 |
| 16 | 19 | 25 | 23 | 22.3 | 4 | 8 | 8 | 2.1 | 96 |
| 17 | 23 | 20 | 26 | 23.0 | 2 | 2 | 2 | 4.7 | 96 |
| 18 | 19 | 10 | 9 | 12.7 | 8 | 4 | 4 | 0.8 | 96 |
| 19 | 3 | 0 | 2 | 1.7 | 2 | 0 | 20 | 6.3 | 104 |
| 20 | 2 | 4 | 11 | 5.7 | 20 | 20 | 16 | 0.7 | 108 |
| 21 | 12 | 4 | 12 | 9.3 | 16 | 16 | 8 | 0.0 | 103 |
| 22 | 12 | 11 | 10 | 11.0 | 8 | 8 | 4 | 1.0 | 102 |
| 23 | 14 | 11 | 10 | 11.7 | 8 | 8 | 6 | 1.2 | 102 |
| 24 | 10 | 8 | 4 | 7.3 | 6 | 32 | 2 | 0.0 | 102 |
| 25 | 4 | 0 | 2 | 2.0 | 4 | 0 | 6 | 0.4 | 102 |
| 26 | 2 | 3 | 8 | 4.3 | 12 | 8 | 18 | • | 102 |
| 27 | 10 | 12 | 11 | 11.0 | 18 | 18 | 20 | 2.2 | 102 |
| 28 | 12 | 15 | 13 | 13.3 | 26 | 28 | 28 | 2.2 | 108 |
| 29 | 13 | 18 | 13 | 14.7 | 20 | 16 | 16 | 8.6 | 105 |
| 30 | 17 | 16 | 22 | 18.3 | 20 | 20 | 20 | 26.2 | 103 |
| 31 | 24 | 8 | 7 | 13.0 | 22 | 24 | 28 | 17.8 | 90 |

Tabela 3. Liczba dni charakterystycznych w bieżącym miesiącu oraz średnia liczba dni charakterystycznych dla tego miesiąca w wieloleciu 1960 - 2000

Table 3. Number of days with threshold value in current month and monthly average number of days with threshold value in the 1960- 2000 period

| Nazwa / Name | 1960-2000 | 1962-III |
|------------------------------|-----------|----------|
| Przymrozkowe (Tmin < 0°C) | 28 | 31 |
| Mroźne (Tmax < 0°C) | 17 | 25 |
| Bardzo mroźne (Tmin < -10°C) | 5 | 17 |
| Ciepłe (Tmax > 20°C) | 0 | 0 |
| Gorące (Tmax > 25°C) | 0 | 0 |
| R > 1 mm | 15 | 13 |
| R > 10 mm | 3 | 4 |
| Liczba dni z pokrywą śnieżną | 30 | 31 |

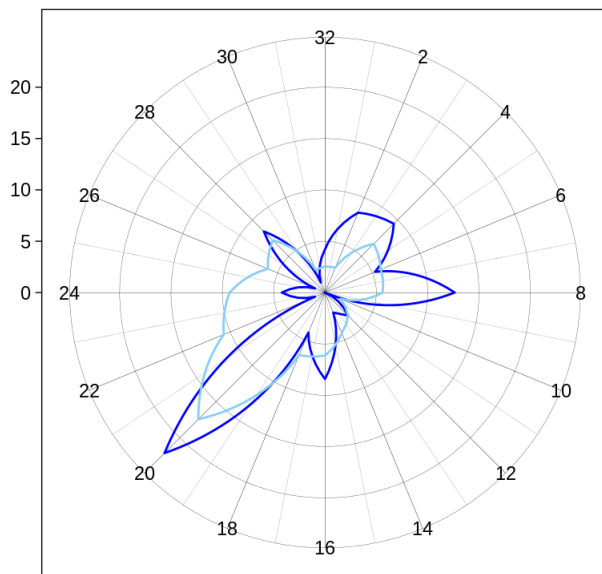
Tabela 4. Wartości średnie i ekstrema miesięczne na tle charakterystyk miesięcznych dla wielolecia 1960 - 2000

Table 4. Average and extreme monthly values vs. average monthly characteristics for the 1960- 2000 period

| | Opis | Description | 1960-2000 | 1962-III |
|---------|---------------------------|-----------------------|--------------------|--------------------|
| T [°C] | Średnia miesięczna | Monthly average | -3.4 | -7.1 |
| | Maksymalna średnia dobowa | Maximum daily average | -0.8 | -4.1 |
| | Minimalna średnia dobowa | Minimum daily average | -5.7 | -9.7 |
| | Średnie maksimum | Average maximum | 8.9 (1981-03-31) | 2.4 (1962-03-05) |
| | Absolutne maksimum | Absolute maximum | 13.2 (1982-03-27) | 5.6 (1962-03-05) |
| | Średnie minimum | Average minimum | -22.5 (1981-03-31) | -14.3 (1962-03-05) |
| | Absolutne minimum | Absolute minimum | -23.8 (1971-03-04) | -16.3 (1962-03-14) |
| P [hPa] | Średnia miesięczna | Monthly average | 856.7 | 851.8 |
| | Maksimum | Maximum | 878.9 (1990-03-16) | 865.7 (1962-03-08) |
| | Minimum | Minimum | 830.7 (1988-03-01) | 839.8 (1962-03-04) |
| V [m/s] | Średnia miesięczna | Monthly average | 11.3 | 11.1 |
| | Średnie maksimum | Average maximum | 14.5 | 14.5 |
| | Absolutne maksimum | Absolute maximum | 40.0 (1992-03-13) | 38.0 (1962-03-09) |
| R [mm] | Suma miesięczna | Monthly sum | 94.2 | 121.7 |
| | Maksymalna suma dobowa | Maximum daily sum | 48.4 (2000-03-08) | 26.2 (1962-03-30) |

(a) Wind direction frequency [%]

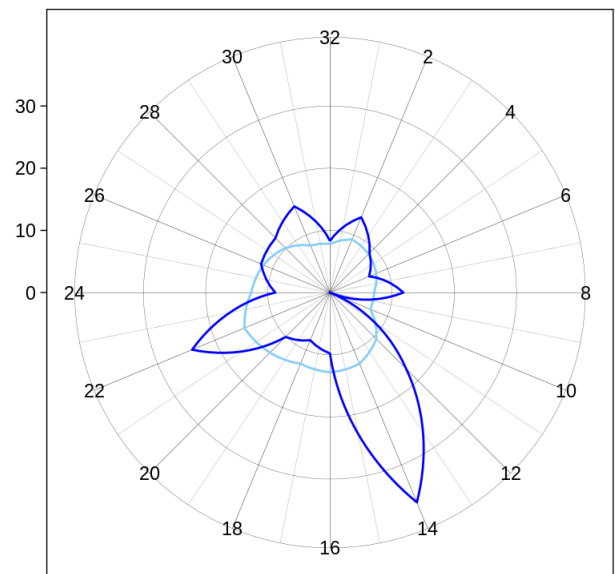
Calm: current NA % Calm 1960-200 1.8 %



— March 1960-2000 — March 1962

(b) Wind velocity [m/s]

Calm current NA % Calm 1960-2000 1.8 %

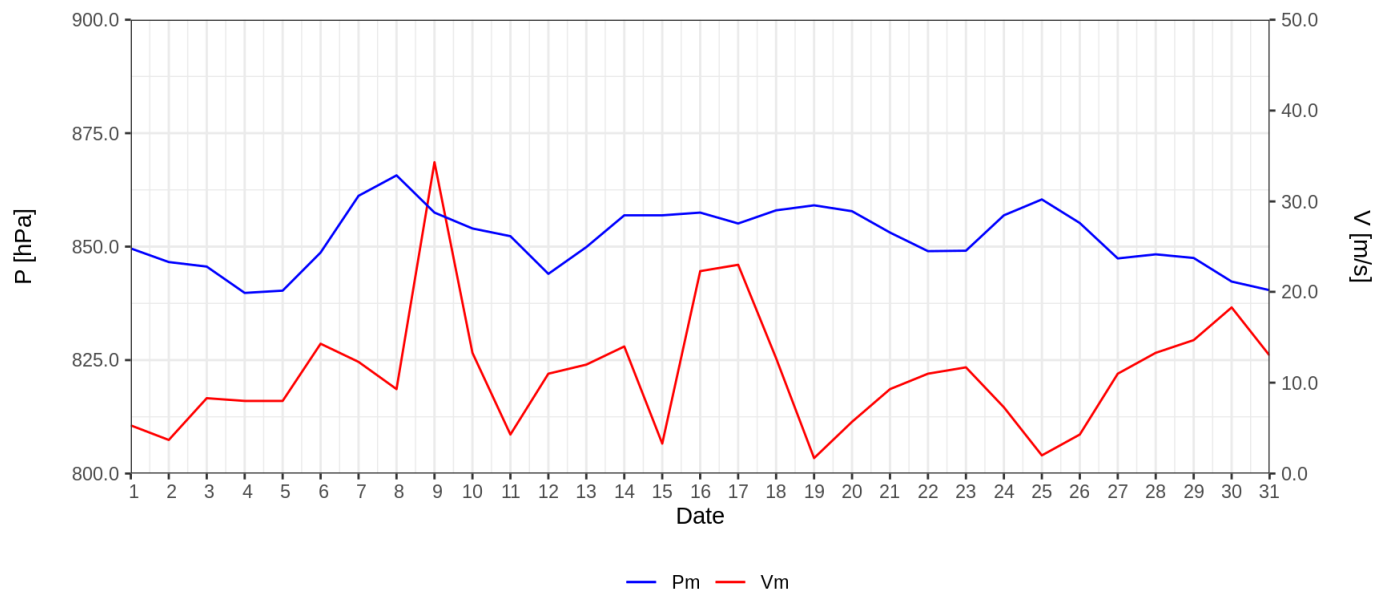


— March 1960-2000 — March 1962

Ryc. 1. Częstość (a) i prędkość wiatru (b) wg kierunków

Fig. 1. Wind direction frequency (a) and wind velocity for a given direction (b)

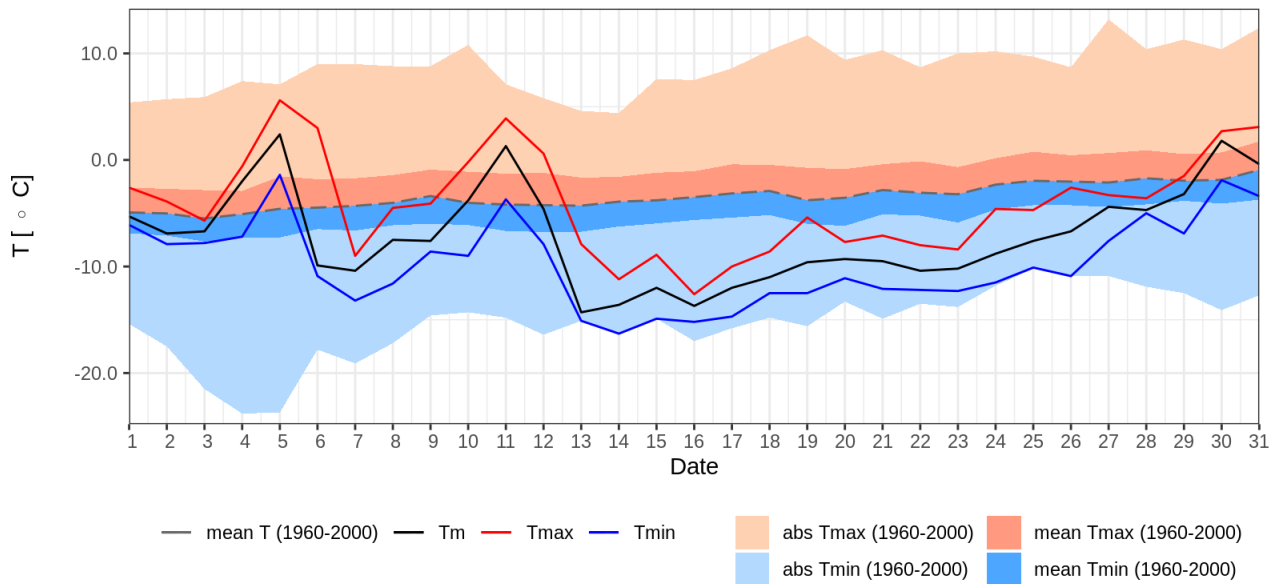
*) W statystyce dotyczącej kierunku wiatru uwzględniono kierunki wiatru odpowiadające skali 16 stopniowej prezentowanej wartościami [2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32].



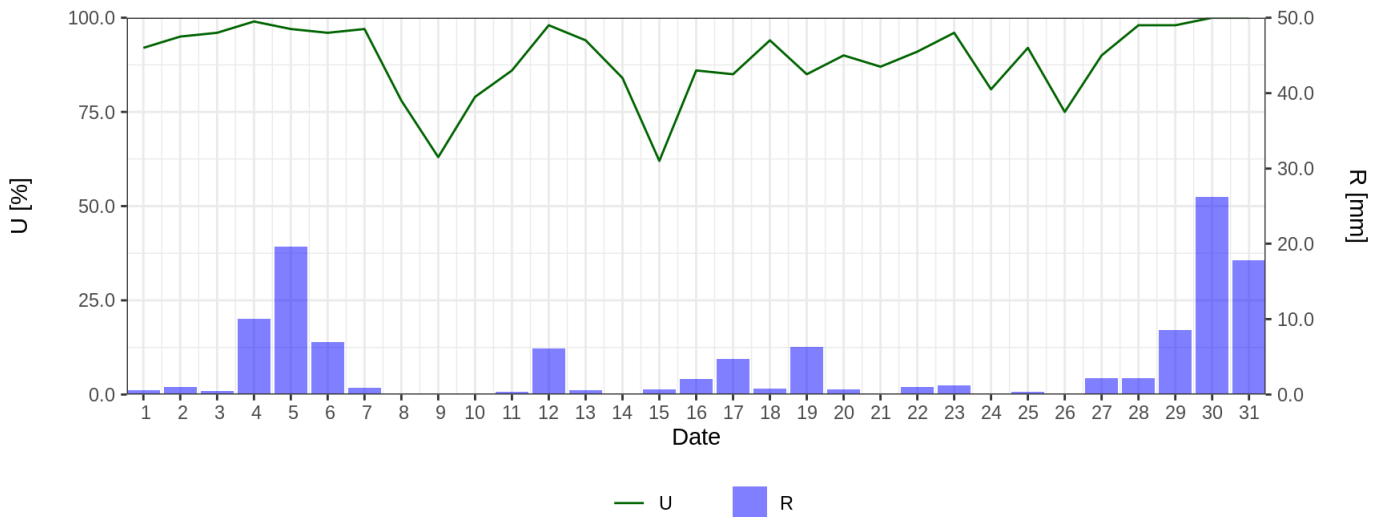
— Pm — Vm

Ryc. 2. Średnie dobowe ciśnienie atmosferyczne i prędkość wiatru

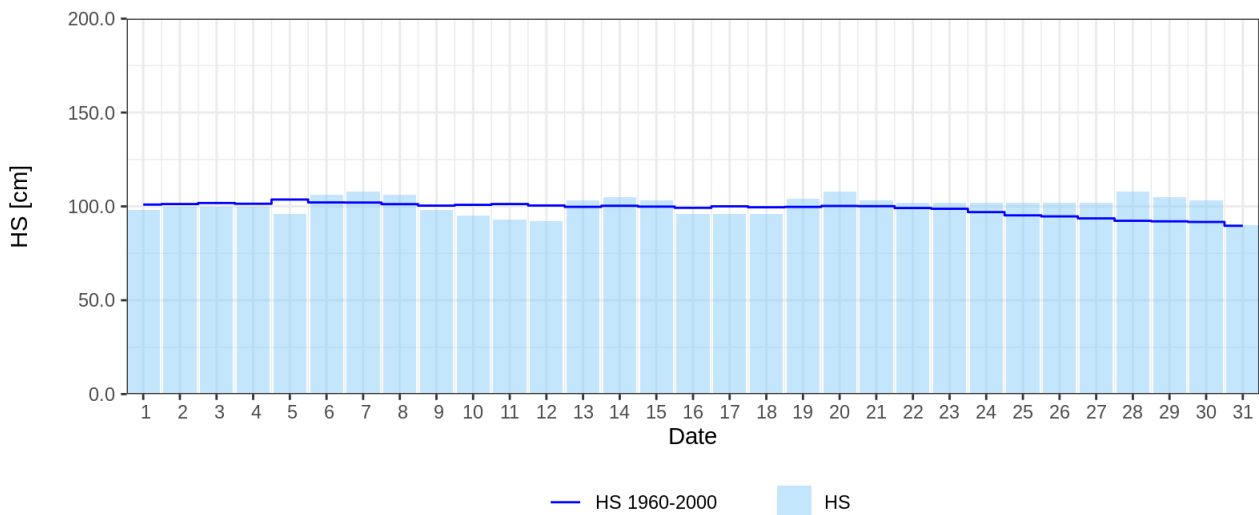
Fig. 2. Daily average air pressure and wind speed



Ryc. 3. Średnia dobowa, minimalna i maksymalna temperatura powietrza dla miesiąca na tle danych z wielolecia 1960 - 2000
 Fig. 3. Daily mean, maximum and minimum air temperature for given month and 1960-2000 period



Ryc. 4. Średnia dobowa wilgotność względna powietrza i dobowe sumy opadu atmosferycznego
 Fig. 4. Mean daily relative humidity and daily sum of precipitation



Ryc. 5. Wysokość pokrywy śnieżnej
 Fig. 5. Snow cover depth