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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 dobową                             | 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] |       |       |       |       |
|----|--------|------|------|------|------|------|------|-------|-------|-----|-----|-----|-----|---------|-------|-------|-------|-------|
|    | 00     | 07   | 12   | 18   | Tm   | Tmax | Tmin | Tmin5 | 00    | 06  | 12  | 18  | Um  | 00      | 06    | 12    | 18    | Pm    |
| 1  | 7.4    | 6.3  | 9.7  | 9.8  | 8.3  | 12.0 | 5.9  | 5.1   | 99    | 99  | 92  | 95  | 96  | 858.7   | 860.0 | 861.5 | 861.6 | 860.5 |
| 2  | 8.5    | 7.3  | 8.0  | 8.0  | 8.0  | 10.8 | 6.5  | 5.0   | 96    | 100 | 98  | 92  | 97  | 861.4   | 861.4 | 863.0 | 864.4 | 862.5 |
| 3  | 7.0    | 8.6  | 13.7 | 13.3 | 10.7 | 15.9 | 6.5  | 3.8   | 91    | 85  | 72  | 71  | 80  | 864.2   | 862.9 | 861.3 | 861.0 | 862.4 |
| 4  | 10.1   | 7.2  | 9.3  | 7.2  | 8.5  | 13.4 | 6.8  | 5.1   | 96    | 98  | 67  | 83  | 86  | 860.6   | 859.3 | 859.8 | 860.0 | 859.9 |
| 5  | 5.9    | 8.5  | 15.2 | 16.2 | 11.5 | 18.2 | 5.0  | 2.5   | 88    | 73  | 66  | 71  | 75  | 858.4   | 855.4 | 854.2 | 852.5 | 855.1 |
| 6  | 11.4   | 9.1  | 7.0  | 5.3  | 8.2  | 16.3 | 4.9  | 3.8   | 96    | 98  | 100 | 100 | 99  | 853.2   | 853.9 | 852.6 | 852.9 | 853.1 |
| 7  | 4.8    | 4.8  | 3.6  | 4.6  | 4.5  | 5.9  | 3.1  | 2.7   | 100   | 100 | 100 | 97  | 99  | 854.2   | 854.6 | 856.1 | 858.3 | 855.8 |
| 8  | 4.9    | 4.7  | 6.3  | 7.4  | 5.8  | 7.5  | 4.1  | 2.9   | 99    | 100 | 95  | 96  | 98  | 858.4   | 857.9 | 858.0 | 858.9 | 858.3 |
| 9  | 7.7    | 6.7  | 8.2  | 8.9  | 7.9  | 8.9  | 6.1  | 5.1   | 99    | 100 | 96  | 90  | 96  | 859.4   | 859.6 | 860.4 | 859.5 | 859.7 |
| 10 | 8.5    | 10.3 | 14.2 | 10.8 | 11.0 | 15.8 | 6.6  | 1.8   | 94    | 67  | 66  | 96  | 81  | 859.0   | 858.0 | 857.7 | 858.7 | 858.4 |
| 11 | 7.2    | 4.8  | 11.9 | 10.3 | 8.6  | 12.5 | 3.7  | 1.5   | 94    | 92  | 70  | 81  | 84  | 862.1   | 864.4 | 865.9 | 865.4 | 864.5 |
| 12 | 10.5   | 14.7 | 20.1 | 17.1 | 15.6 | 21.0 | 8.6  | 5.4   | 93    | 72  | 57  | 79  | 75  | 864.1   | 866.3 | 869.1 | 868.0 | 866.9 |
| 13 | 14.0   | 15.4 | 18.3 | 15.9 | 15.9 | 20.4 | 14.0 | 9.6   | 71    | 83  | 89  | 89  | 83  | 869.4   | 870.0 | 871.7 | 871.9 | 870.8 |
| 14 | 14.7   | 15.4 | 22.1 | 18.5 | 17.7 | 23.2 | 14.0 | 10.2  | 91    | 87  | 59  | 76  | 78  | 871.4   | 870.5 | 870.5 | 870.1 | 870.6 |
| 15 | 16.7   | 20.3 | 22.5 | 18.3 | 19.5 | 24.0 | 16.0 | 6.3   | 73    | 42  | 58  | 74  | 62  | 870.3   | 870.2 | 870.6 | 870.1 | 870.3 |
| 16 | 16.6   | 16.4 | 19.5 | 15.1 | 16.9 | 20.6 | 14.4 | 10.7  | 74    | 80  | 71  | 100 | 81  | 869.3   | 867.2 | 866.7 | 867.1 | 867.6 |
| 17 | 10.5   | 10.5 | 10.1 | 7.2  | 9.6  | 16.6 | 6.9  | 5.7   | 100   | 97  | 99  | 99  | 99  | 865.4   | 864.2 | 865.1 | 862.6 | 864.3 |
| 18 | 6.4    | 6.6  | 8.5  | 6.1  | 6.9  | 9.1  | 5.3  | 3.0   | 88    | 99  | 99  | 99  | 96  | 863.8   | 863.3 | 863.7 | 863.1 | 863.5 |
| 19 | 5.2    | 5.6  | 9.3  | 9.0  | 7.3  | 11.7 | 4.5  | 1.8   | 99    | 99  | 82  | 76  | 89  | 862.6   | 861.2 | 861.5 | 859.8 | 861.3 |
| 20 | 9.9    | 9.3  | 8.4  | 8.4  | 9.0  | 10.9 | 7.7  | 5.8   | 98    | 100 | 100 | 98  | 99  | 858.6   | 859.1 | 862.6 | 865.3 | 861.4 |
| 21 | 8.2    | 7.8  | 12.6 | 11.2 | 10.0 | 13.6 | 7.0  | 5.6   | 99    | 100 | 83  | 91  | 93  | 866.2   | 865.0 | 866.8 | 867.6 | 866.4 |
| 22 | 8.9    | 9.6  | 15.3 | 14.0 | 12.0 | 16.9 | 7.6  | 4.8   | 97    | 100 | 70  | 83  | 88  | 867.8   | 866.8 | 867.2 | 865.7 | 866.9 |
| 23 | 10.8   | 9.0  | 11.9 | 10.2 | 10.5 | 15.5 | 8.5  | 5.8   | 96    | 100 | 75  | 89  | 90  | 866.1   | 867.1 | 868.1 | 867.3 | 867.1 |
| 24 | 10.5   | 13.1 | 18.7 | 15.8 | 14.5 | 19.7 | 9.1  | 4.8   | 88    | 86  | 69  | 95  | 85  | 864.5   | 863.1 | 862.1 | 861.3 | 862.8 |
| 25 | 15.8   | 10.4 | 13.7 | 8.8  | 12.2 | 16.7 | 8.8  | 8.8   | 87    | 92  | 76  | 93  | 87  | 860.0   | 859.9 | 861.8 | 861.8 | 860.9 |
| 26 | 6.9    | 5.5  | 5.4  | 6.1  | 6.0  | 8.9  | 4.6  | 4.8   | 93    | 100 | 100 | 100 | 98  | 861.7   | 859.4 | 860.4 | 862.4 | 861.0 |
| 27 | 5.8    | 5.6  | 5.3  | 5.8  | 5.6  | 6.9  | 4.9  | 4.4   | 100   | 100 | 100 | 100 | 100 | 864.5   | 866.2 | 869.1 | 870.6 | 867.6 |
| 28 | 5.0    | 5.4  | 7.7  | 6.2  | 6.1  | 8.8  | 4.4  | 4.2   | 97    | 100 | 81  | 92  | 93  | 871.6   | 871.4 | 872.2 | 871.2 | 871.6 |
| 29 | 5.6    | 5.9  | 10.8 | 9.6  | 8.0  | 12.3 | 5.1  | 1.2   | 91    | 96  | 80  | 89  | 89  | 871.2   | 870.3 | 871.9 | 871.3 | 871.2 |
| 30 | 8.6    | 8.4  | 13.2 | 11.2 | 10.4 | 14.2 | 7.5  | 2.2   | 89    | 96  | 84  | 91  | 90  | 871.7   | 871.2 | 871.4 | 870.6 | 871.2 |
| 31 | 10.1   | 11.1 | 16.0 | 11.4 | 12.2 | 17.0 | 9.6  | 3.3   | 93    | 88  | 66  | 64  | 78  | 870.8   | 869.3 | 868.9 | 866.4 | 868.9 |

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

| D  | V [m/s] |    |    |      | $\alpha$ [1-32] |    |    | R[mm] | HS[cm] |
|----|---------|----|----|------|-----------------|----|----|-------|--------|
|    | 06      | 12 | 18 | Vm   | 06              | 12 | 18 |       |        |
| 1  | 10      | 10 | 5  | 8.3  | 22              | 20 | 20 | 14.1  | NA     |
| 2  | 4       | 7  | 5  | 5.3  | 26              | 26 | 26 | 2.0   | NA     |
| 3  | 15      | 18 | 15 | 16.0 | 20              | 20 | 22 | •     | NA     |
| 4  | 6       | 6  | 6  | 6.0  | 24              | 24 | 24 | 0.0   | NA     |
| 5  | 21      | 20 | 17 | 19.3 | 18              | 18 | 20 | 9.4   | NA     |
| 6  | 0       | 8  | 9  | 5.7  | 0               | 4  | 4  | 39.5  | NA     |
| 7  | 13      | 10 | 8  | 10.3 | 4               | 2  | 30 | 20.9  | NA     |
| 8  | 10      | 8  | 8  | 8.7  | 28              | 28 | 30 | 0.9   | NA     |
| 9  | 14      | 7  | 8  | 9.7  | 4               | 4  | 4  | •     | NA     |
| 10 | 6       | 14 | 11 | 10.3 | 24              | 20 | 24 | 3.3   | NA     |
| 11 | 11      | 12 | 10 | 11.0 | 22              | 20 | 16 | •     | NA     |
| 12 | 13      | 8  | 13 | 11.3 | 20              | 18 | 14 | •     | NA     |
| 13 | 8       | 4  | 8  | 6.7  | 20              | 6  | 12 | 1.1   | NA     |
| 14 | 5       | 8  | 11 | 8.0  | 14              | 20 | 16 | •     | NA     |
| 15 | 2       | 3  | 5  | 3.3  | 20              | 8  | 12 | •     | NA     |
| 16 | 10      | 4  | 3  | 5.7  | 16              | 20 | 6  | 13.7  | NA     |
| 17 | 10      | 17 | 13 | 13.3 | 20              | 20 | 20 | 9.6   | NA     |
| 18 | 8       | 2  | 3  | 4.3  | 22              | 24 | 28 | 0.6   | NA     |
| 19 | 12      | 10 | 14 | 12.0 | 20              | 20 | 20 | 3.0   | NA     |
| 20 | 10      | 13 | 7  | 10.0 | 26              | 26 | 26 | 0.7   | NA     |
| 21 | 19      | 14 | 7  | 13.3 | 22              | 22 | 24 | •     | NA     |
| 22 | 12      | 11 | 12 | 11.7 | 20              | 20 | 20 | 16.6  | NA     |
| 23 | 3       | 7  | 6  | 5.3  | 30              | 22 | 22 | •     | NA     |
| 24 | 13      | 11 | 14 | 12.7 | 20              | 18 | 14 | •     | NA     |
| 25 | 4       | 6  | 6  | 5.3  | 30              | 22 | 22 | 22.0  | NA     |
| 26 | 7       | 6  | 5  | 6.0  | 6               | 6  | 2  | 10.4  | NA     |
| 27 | 4       | 6  | 9  | 6.3  | 32              | 30 | 2  | 0.5   | NA     |
| 28 | 10      | 6  | 9  | 8.3  | 6               | 6  | 6  | •     | NA     |
| 29 | 6       | 5  | 6  | 5.7  | 8               | 8  | 8  | •     | NA     |
| 30 | 6       | 4  | 3  | 4.3  | 8               | 8  | 8  | •     | NA     |
| 31 | 2       | 5  | 7  | 4.7  | 6               | 16 | 20 | •     | NA     |

**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**

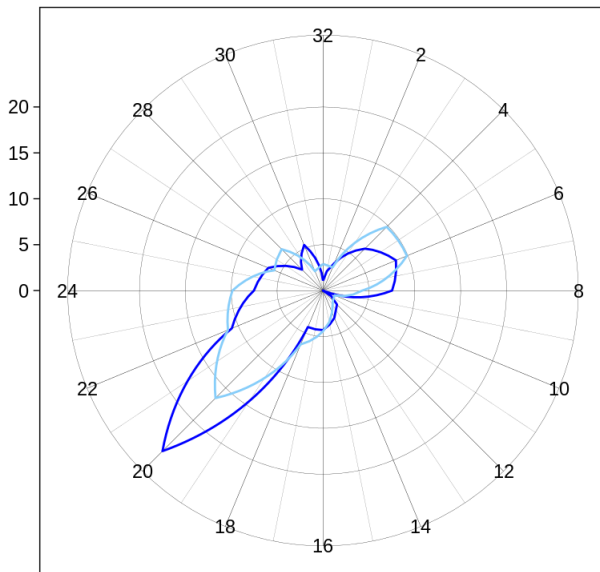
| Nazwa / Name                               | 1960-2000 | 1985-VIII |
|--------------------------------------------|-----------|-----------|
| Przymrozkowe ( $T_{min} < 0^{\circ}C$ )    | 0         | 0         |
| Mroźne ( $T_{max} < 0^{\circ}C$ )          | 0         | 0         |
| Bardzo mroźne ( $T_{min} < -10^{\circ}C$ ) | 0         | 0         |
| Ciepłe ( $T_{max} > 20^{\circ}C$ )         | 3         | 5         |
| Gorące ( $T_{max} > 25^{\circ}C$ )         | 0         | 0         |
| $R > 1 \text{ mm}$                         | 13        | 13        |
| $R > 10 \text{ mm}$                        | 5         | 7         |
| Liczba dni z pokrywą śnieżną               | 0         | 0         |

**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          | 1985-VIII          |
|-------------------|---------------------------|-----------------------|--------------------|--------------------|
| T [ $^{\circ}C$ ] | Średnia miesięczna        | Monthly average       | 10.4               | 10.3               |
|                   | Maksymalna średnia dobowa | Maximum daily average | 14.0               | 14.4               |
|                   | Minimalna średnia dobowa  | Minimum daily average | 7.7                | 7.3                |
|                   | Średnie maksimum          | Average maximum       | 22.0 (1994-08-01)  | 19.5 (1985-08-15)  |
|                   | Absolutne maksimum        | Absolute maximum      | 26.5 (1992-08-08)  | 24.0 (1985-08-15)  |
|                   | Średnie minimum           | Average minimum       | 1.1 (1994-08-01)   | 4.5 (1985-08-15)   |
|                   | Absolutne minimum         | Absolute minimum      | -0.3 (1978-08-28)  | 3.1 (1985-08-07)   |
| P [hPa]           | Średnia miesięczna        | Monthly average       | 864.3              | 864.0              |
|                   | Maksimum                  | Maximum               | 877.2 (1981-08-04) | 871.6 (1985-08-28) |
|                   | Minimum                   | Minimum               | 842.5 (1978-08-08) | 853.1 (1985-08-06) |
| V [m/s]           | Średnia miesięczna        | Monthly average       | 7.4                | 8.7                |
|                   | Średnie maksimum          | Average maximum       | 9.7                | 10.8               |
|                   | Absolutne maksimum        | Absolute maximum      | 30.0 (1981-08-20)  | 21.0 (1985-08-05)  |
| R [mm]            | Suma miesięczna           | Monthly sum           | 145.0              | 168.3              |
|                   | Maksymalna suma dobowa    | Maximum daily sum     | 123.5 (1978-08-08) | 39.5 (1985-08-06)  |

(a) Wind direction frequency [%]

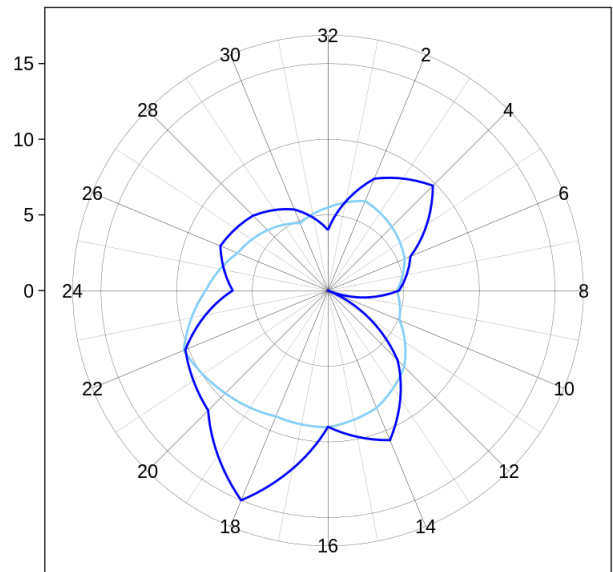
Calm: current NA % Calm 1960-200 2.1 %



— August 1960-2000 — August 1985

(b) Wind velocity [m/s]

Calm current NA % Calm 1960-2000 2.1 %

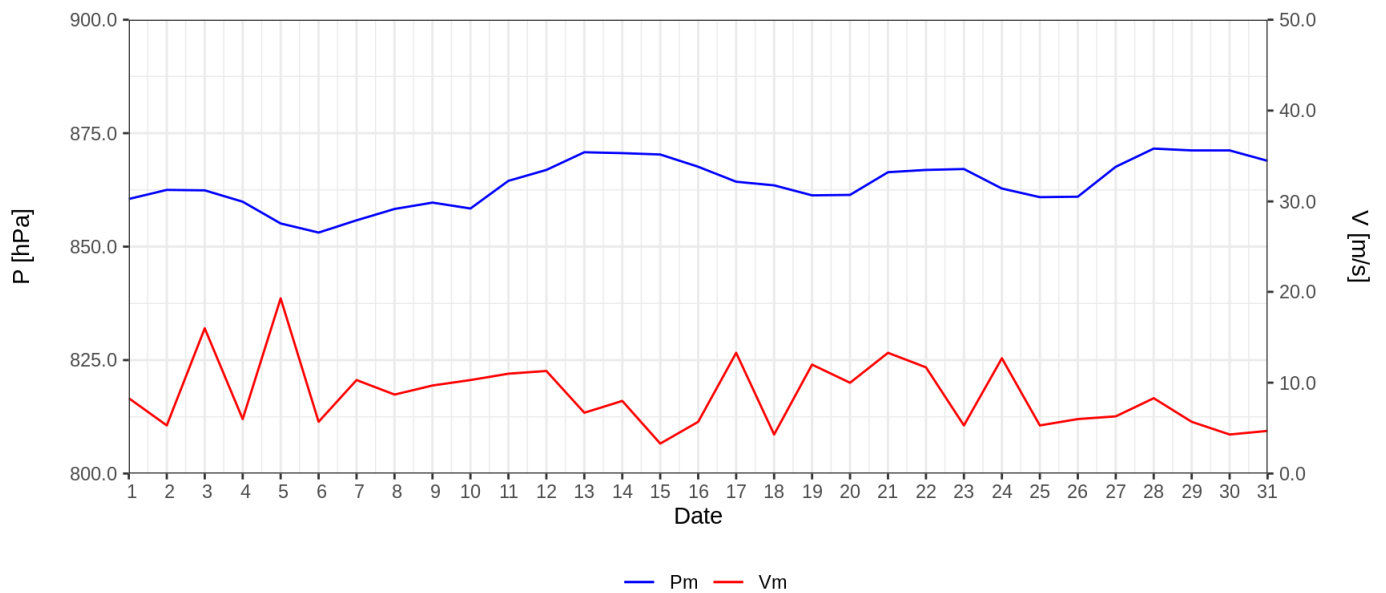


— August 1960-2000 — August 1985

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

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

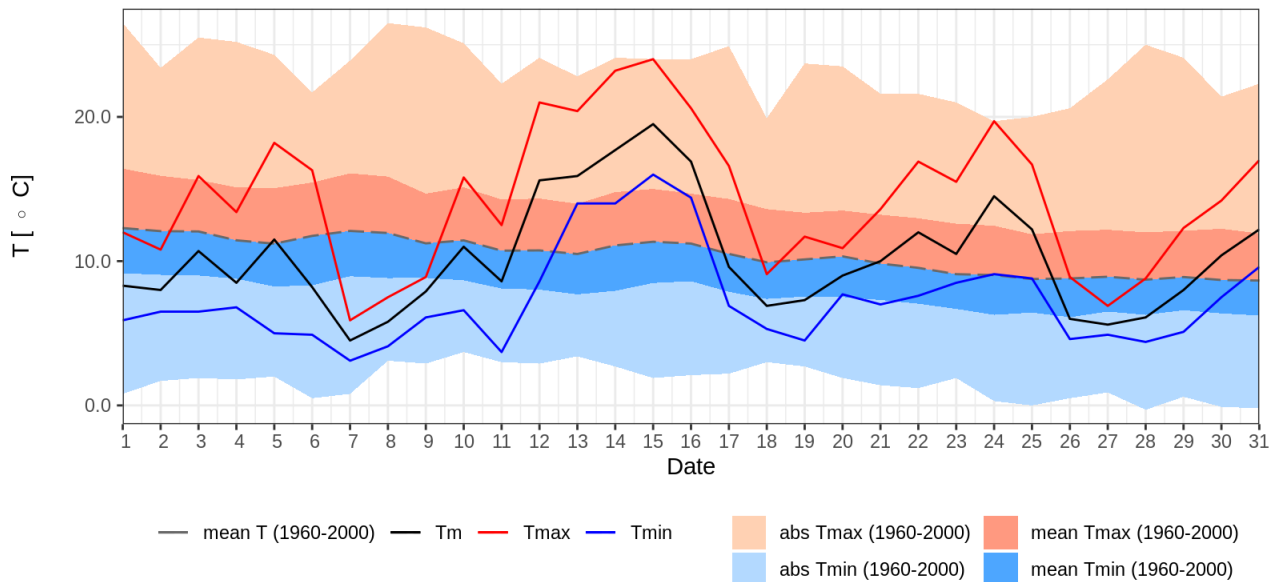
\*) W statystyce dotyczącej kierunku wiatru uwzględniono kierunki wiatru odpowiadające skali 16 stopniowej prezentowanej wartościami [2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32].



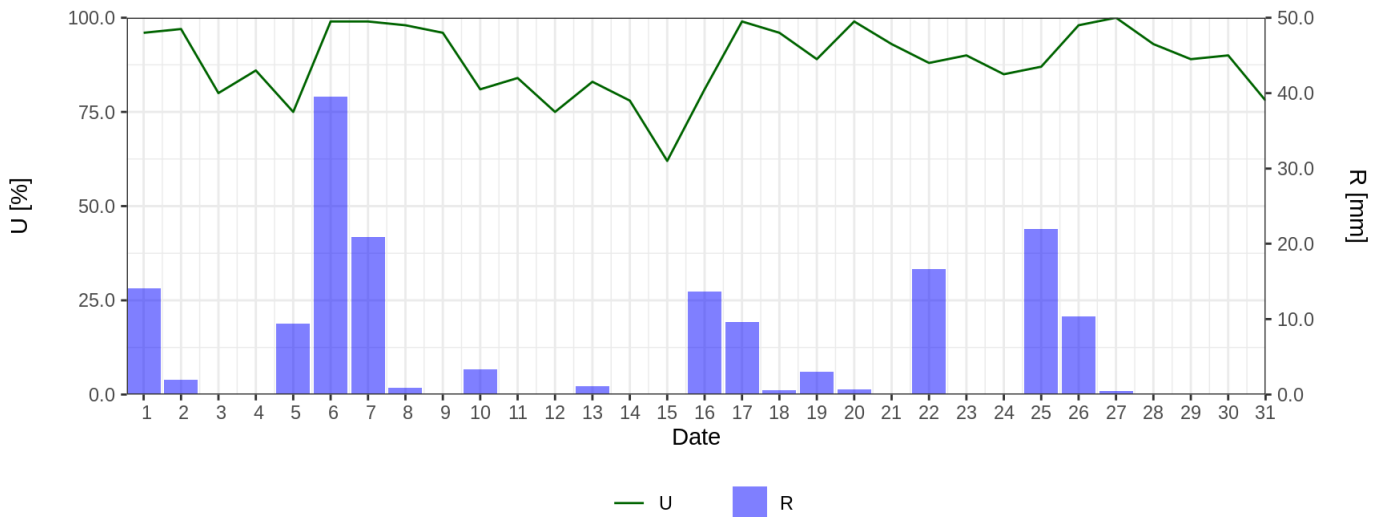
— Pm — Vm

Ryc. 2. Średnie dobowe ciśnienie atmosferyczne i prędkość wiatru

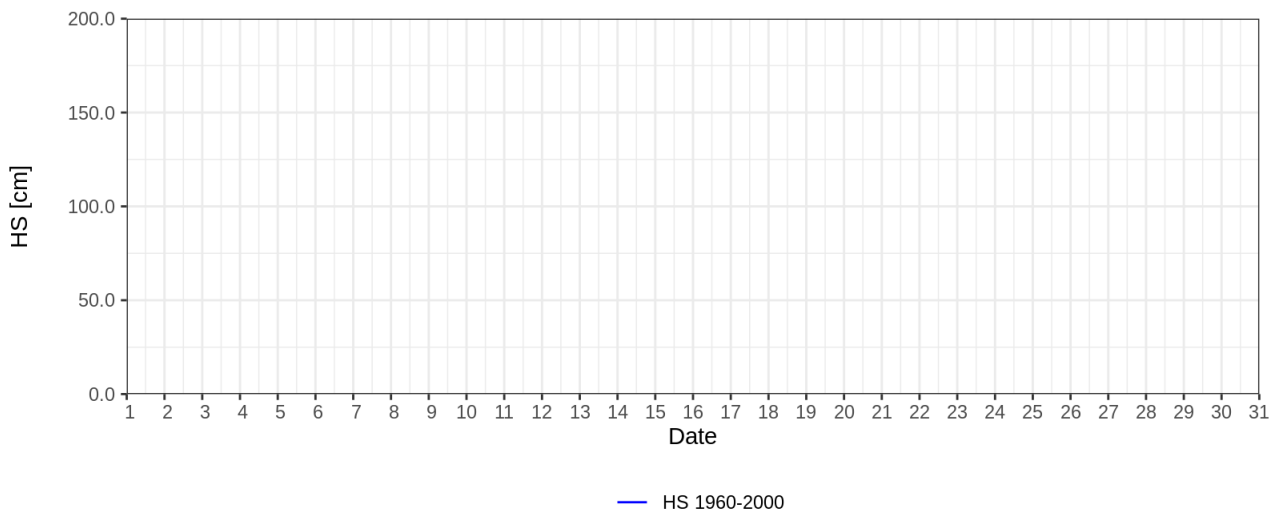
Fig. 2. Daily average air pressure and wind speed



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