

meteoblue point Meteogram 1-6 days

0 Display

The point meteogram 1-6 days (see Figure 1 - 4) shows the hourly development of temperature, precipitation, clouds and wind, for the forecast period (1st to 6th day after calculation of forecast). Some data (wind direction) are summarized in 3 hour intervals.

All data are displayed in local time, beginning with the valid time at the beginning of the forecast period. In countries with summertime correction, the meteogram time will be changed on the day of the summertime switch. A meteogram produced 1-6 days before the summer-time switch will thus display the days after the switch with 1 hour difference to the future "actual" time. After the switch, the point meteogram will again display day 1-6 in the correct actual time.

1 Parameters

1.1 Temperature

Temperature charts (Figure 1) show the hourly temperature course during the forecast period. Temperature curves can be illustrated with temperature color scales, to improve interpretation.

1.2 Precipitation

Precipitation charts (Figure 2) show the amount, type and probability of precipitation.

Precipitation amount is shown in mm (which corresponds to liter per square meter). Total precipitation amount (blue bars) is the sum of shower (light blue bars) and frontal precipitation (not indicated separately).

Precipitation types are rain (no separate symbol), snow (*), and freezing rain (!). Hail is only displayed for special services.

Precipitation probability is calculated from the frequency of precipitation forecasts in previous forecasts, in the region, and in neighbouring hours, and shown as percent (%).

1.3 Clouds

Cloud charts (Figure 3) show the cloud development over the forecast period in 0 -14 kilometer altitude above sea level (km asl). Cloud density is shown in grey scale steps (see chart legend).

The **average altitude** of the surrounding area is plotted on the bottom of the chart. In the sample (Figure 3), the average altitude of the region is 1200 m. If the cloud base (lower end of the clouds) is below the altitude of the location selected, this indicates mist or fog in the low areas.

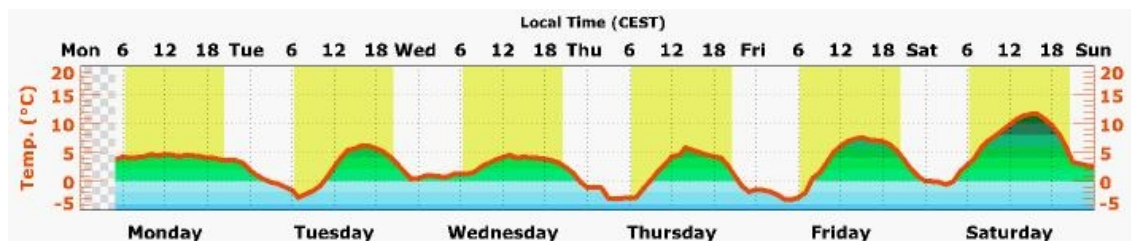


Figure 1. Temperature chart with 6 day forecast. Variable scale based on expected temperature.

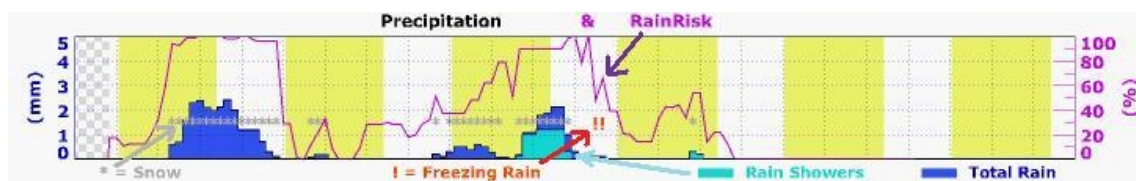


Figure 2. Precipitation chart with 6 day forecast. Amounts for total (blue bars) and shower (light blue bars) precipitation types as rain (no special symbols), snow (*), freezing rain (!). Probability in percent (%). All values are given per hour.

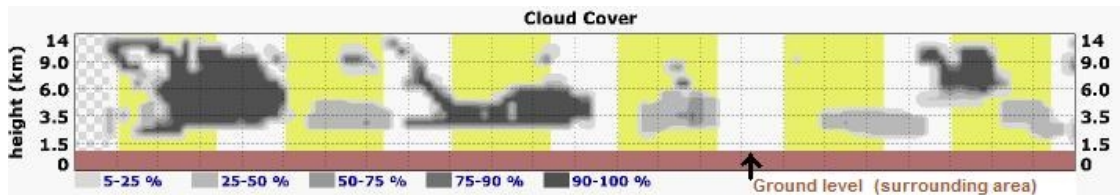


Figure 3. Cloud chart with 6 day forecast. Cloud cover in 5 classes (as % of total sky cover). Ground level as average of surrounding area (radius given in meteogram).

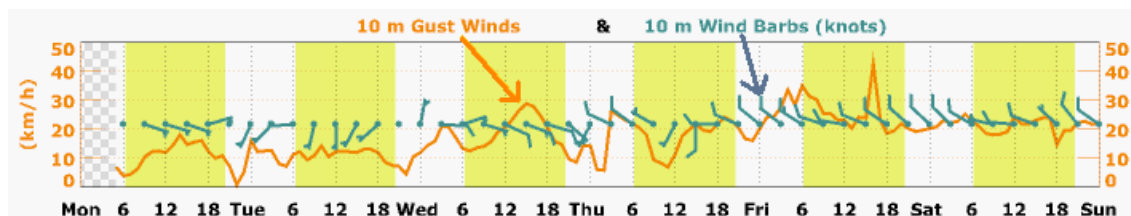


Figure 4. Wind chart with 6 day forecast. Wind speed in km/h (kilometer per hour). Wind bars (symbols) indicate the cardinal directions (N, S, E, W) from which the wind is blowing.

From the height, density and sequence of the clouds, the type of weather expected can be interpreted. A typical cold front starts with low clouds, which build up over time. Thunderstorm weather is characterized by cloudless mornings and rapid cloud development during the day, with dense and high clouds in the afternoon, which may disappear again during the night.

After using the cloud graph for some time, you will find it easy to understand the expected weather patterns.

1.4 Wind

Wind charts (see Figure 4) show the hourly wind speed and direction during the forecast period. **Wind speed** is shown in a curve (km/h) for maximum wind speed (wind gusts) during the previous indicated hour. **Wind direction** is shown by wind bars indicating the cardinal directions (N, S, E, W) from which the wind is blowing.

2 Use

Accuracy of the point Meteogram 1-6 days is usually very high within 1-3 days (12-72 hours) of the time of issue. Changes between a forecast and actual observation occur mostly in the phasing (timely development) of the forecast. Examples:

Precipitation occurrence:

- Probability of detection: 60%-80% of predicted precipitation events occur.
- False alarm rate: Less than 30% of predicted precipitation events do not occur.
- Precipitation amount is usually within +/- 30% of predicted. Local conditions may differ: Through continuous observation, systematic differences for very local conditions (mountain summit, valley) will become apparent.

Precipitation probability:

- Probability is usually higher for "Frontal" precipitation, i.e. fronts which move over a large area.
- Prediction of Thunderstorm activity is good; however, the actual distribution of the precipitation may be quite "erratic". Local patterns may influence accuracy, and are usually known by local practitioners.

Detail 1-6 day meteograms give a good overview of the expected weather patterns, and are used for operational planning.

More information on forecasts and display can be found on www.meteoblue.com (see HELP point meteograms).

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