

meteoblue SNOW meteogram

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0 Display

The SNOW meteogram 1-7days (see Figure 0.1) shows the local development of temperature in various altitudes, and the precipitation, snow melt and snow height at ground level in hourly steps for the next days. All data are displayed in local time, beginning with the valid time at the beginning of the forecast period for the surrounding area.

The SNOW meteogram is available for all meteoblue model domains (Europe, South America, Africa, Southeast Asia). In other areas, the SNOW meteogram can only be produced upon special request. The current availability of meteoblue models is presented with our model coverage.

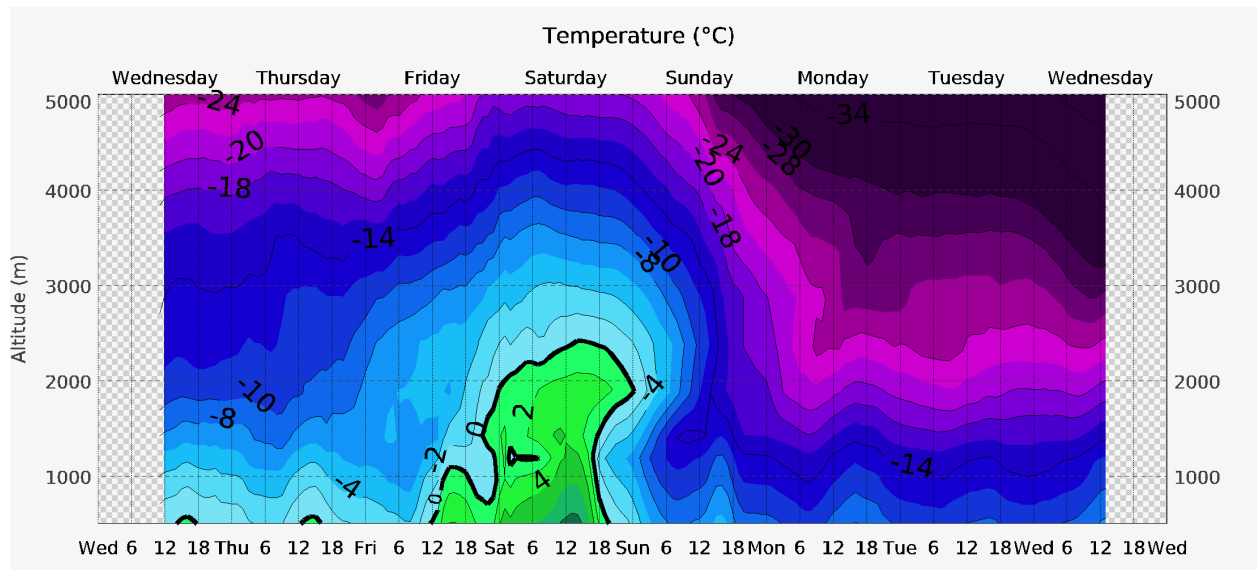


Figure 0.1: Diagram of temperature layers with 7 day forecast. Freezing level (Zero °C) marked by black line. Ground level is the average altitude of the area surrounding the selected place.

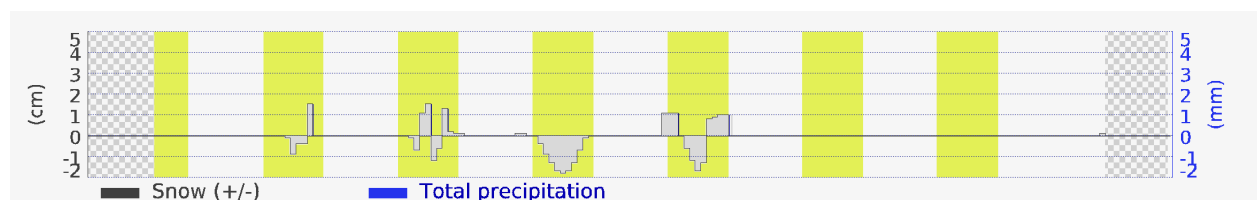


Figure 0.2: Precipitation diagram with 7 day forecast. Precipitation amounts for total (blue bars) and snow (white bars). Snow is given in mm water equivalent (WE): 1 mm WE = approximately 10 mm snow cover. Negative snow bars indicate snow melt. Values are accumulated sums of preceding hour.

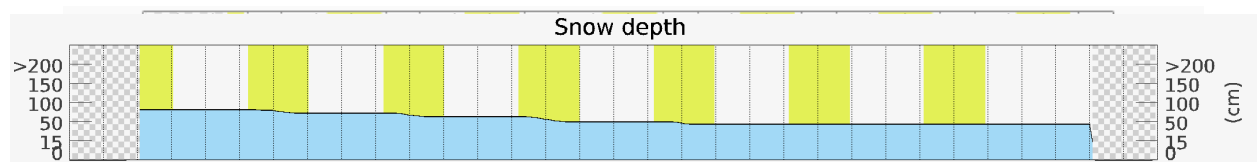


Figure 0.3: Snow cover diagram with 7 day forecast. Snow level (light blue) in cm represents average ground cover of area. Values are valid for each hour. Scale for snow levels ends at >200 cm.

1 Weather variables

1.1 Temperature

The temperature diagram (Figure 0.1) shows the hourly temperature in the air up to 500 hPa pressure (approximately 5 km asl) during the forecast period, including the freezing level, if it occurs below the 500 hPa level. Temperature curves use the standard temperature colour scales, to improve interpretation.

1.2 Precipitation amount and type

The precipitation diagram (Figure 0.2) shows the amount and type of precipitation, as well as snow melt (negative scale). All values are sums of the preceding hours.

Precipitation are rain (blue bars) or snow (white bars). **Precipitation for snow** is shown in cm (centimeters)

Precipitation for rain is shown in mm (which corresponds to liter per square meter).

1.3 Snow melt and cover

Snow melt is shown in cm (centimeters) as white bars with negative value (sum of preceding hour) underneath the precipitation diagram (Figure 0.3). **Snow cover** is shown in cm as light blue area in the snow diagram (Figure 3) for the respective time. The scale for snow levels end at >200 cm, and higher levels are shown as if they were slightly above 200 cm.

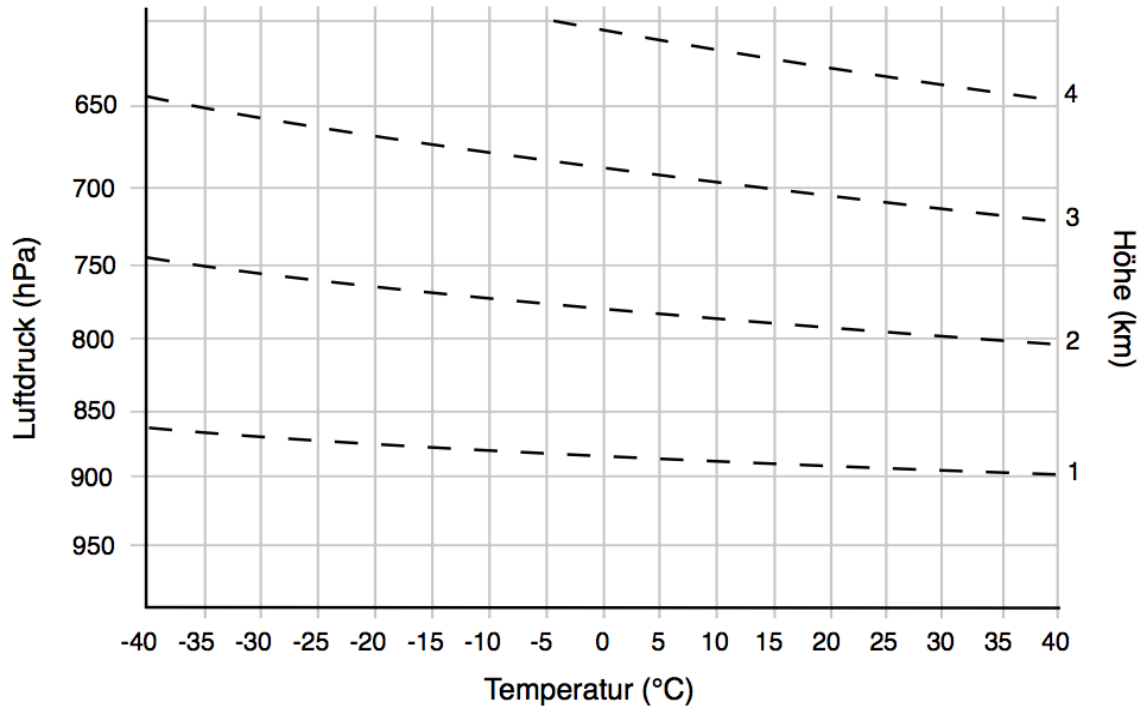
The **snow cover** (snow level) represents the average ground cover in the area surrounding the selected location. It considers previous snowfall during the cold seasons, so it represents an accumulated value for the season.

2 Units & conversions

2.1 Snow levels

Snow fall, melt and **cover** are all shown in cm (centimeters). One cm of snow cover is equivalent to 0.4 inches, and to approximately one mm of water, when melted. Light snow is less dense (0.7- 0.9 mm of WE) and "old" compacted snow is more dense (1.2 - 2 mm WE).

2.2 Pressure levels & altitude



2.1. Figure: bla

Pressure is provided in hPa (hectoPascal). The pressure levels used are standard atmosphere layers. Altitude is given in kilometers above sea level (km asl). Pressure levels can be calculated from the chart for transformation of air pressure into altitude

Die Bodenhöhe entspricht der durchschnittlichen Höhe der Gitterzelle des gewählten Ortes. .

2.3 Forecast area

The model "grid cell" (smallest area unit for calculation) size defines the validity area of a SNOW meteogram. The elevation of the SNOW meteogram is the averaged elevation of the model "grid cell" from which the meteogram is extracted. This may be different from the elevation of the selected location.

Das SNOW Meteogramm ist für jeden Ort der Welt verfügbar.

2.4 Time

The SNOW meteogram time axis is shown in local time valid at the date of diagram generation. Local time zone information Further local time informations is available via local airports or <http://www.timeanddate.com/worldclock/> verfügbar. <http://www.timeanddate.com/worldclock/>.

In countries with summertime correction, the meteogram time will be changed on the day of the summer-time switch. A meteogram produced 1-7 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 SNOW meteogram will again display day 1-7 in the correct actual time.

3 Application

The SNOW meteogram shows the snowfall, snow melt and snow accumulation within the area surrounding a selected place, as well as the freezing level. This gives a good indication of the snow level in the area, and as it develops through the season.

The SNOW meteogram can be used for short range planning, area monitoring and as an easily readable information tool. Correct interpretation may require a certain knowledge of the area and constant comparison to the actual situation.

The SNOW meteogram provides an overview for the area. Actual snow levels may differ considerably within an area, even within short distances of hundred meters. An area forecast can not be directly compared to individual measurements of snow in the area. Further, snow levels may be altered locally by compression, sliding or wind drift. Furthermore, snow depths can be changed locally by compression, displacement or water drainage. Thus, an area forecast can not be compared directly with individual snow depth measurements in the area.

The SNOW meteogram should therefore not be used as quantitative tool, to replace measurements, for risk assessment and for forensic purposes. The SNOW meteogram can not replace a thorough assessment of the situation in an area if reote or unstable areas are being accessed. Local avalanche risk can be estimated, but NOT assessed with help of the SNOW meteogram.

For movement in snow covered terrain, always consult the locally recommended procedures.

The particular value of the SNOW meteogram lies in the accurate presentation, the 7-day forecast, the detection of local temperature shifts and the long-range availability. It is independent of meteorological stations and observation points in the neighborhood.

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