

About Meteorological Observations

DMI performs a wide array of point measurements at its observing stations in Denmark and Greenland. This is an automated process in which wind, precipitation, temperature, humidity, visibility, pressure, cloud cover, weather and global radiation are measured, and data is transmitted to DMI.

Meteorological observation data are so-called raw data, which means that data is neither quality controlled nor processed in any way. Errors in these measurements may therefore sometimes occur. Errors are typically due to malfunction of instruments caused by wear and tear or exposure to weather and on rare occasions from vandalism. Wear and tear of the instruments are handled proactively by performing service checks at the stations on a regular basis and changing the instruments within a given period. Due to this, you have to be aware of the risk of erroneous measurements when using DMI's meteorological observation data. Quality controlled observation data are called [climate data](#).



When DMI performs meteorological observation measurements, they follow the recommendations of the WMO. These recommendations dictate amongst other things that:

- A temperature measurement is performed by measuring the air temperature 2 meters above ground level.
- A wind observation is performed at a height of 10 meters above open, flat terrain.

DMI continuously works on quality assurance and the maintenance of its measuring instruments in regards to following the recommendations of the WMO. You read more about the guidelines from the WMO [here](#).

Meteorological observation data play a key part in the development and verification of national and international weather forecasts as well as weather- and climate models hereby providing sufficient foundation for DMI to fulfil its mission. Meteorological observation data also shape the foundation of the national climate surveillance, research, as well as the advisory on the present weather and the creation of commercial products.