

About Oceanographic Observations

DMI performs point measurements at tide gauge stations in Denmark. This is an automated process in which the water level and water temperature are measured simultaneously, and data is transmitted to DMI.

The DMI and the Danish Coastal Authority collaborate on the locations of tide gauge stations around Denmark, thereby ensuring that the network of tide gauge stations covers Denmark best possible. The data from the tide gauge stations owned by the DMI as well as the Danish Coastal Authority are available through the oceanographic observation (oceanObs) API service.

The data available through the oceanObs API service have not been subject to quality control nor processed in any way. Errors in measurements may occur. Errors are typically due to malfunction of instruments caused by wear and tear or exposure to weather and seawater and on rare occasions from vandalism. In addition, some instruments are sensitive to ice. Wear and tear of 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 oceanographic observations. DMI plans on making quality controlled oceanographic observation data available in 2022.

Some of the tide gauge stations measure water temperature. Water temperature is a support value, which is required for calculating the sea level for a certain type of tide gauge. The water temperature is measured inside the harbor at a depth of a couple of meters relatively to the undisturbed sea surface. The measurement is therefore not standardized and should be used with this reservation.

DMI performs oceanographic measurements according to recommendations from UNESCO's International Oceanographic Commission (IOC). DMI continuously works on quality assurance and maintenance of measuring instruments according to recommendations of IOC. You can read more about the guidelines from IOC [here](#).

If you have questions concerning the oceanographic data or tide gauge stations please contact the authority responsible for the station in question or the data derived therefrom.

