

National Report of Denmark - 2022

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Denmark

DMI and the Danish Coastal Authority operate together with local harbour authorities tide gauge instruments at more than 80 sites along the Danish coast.

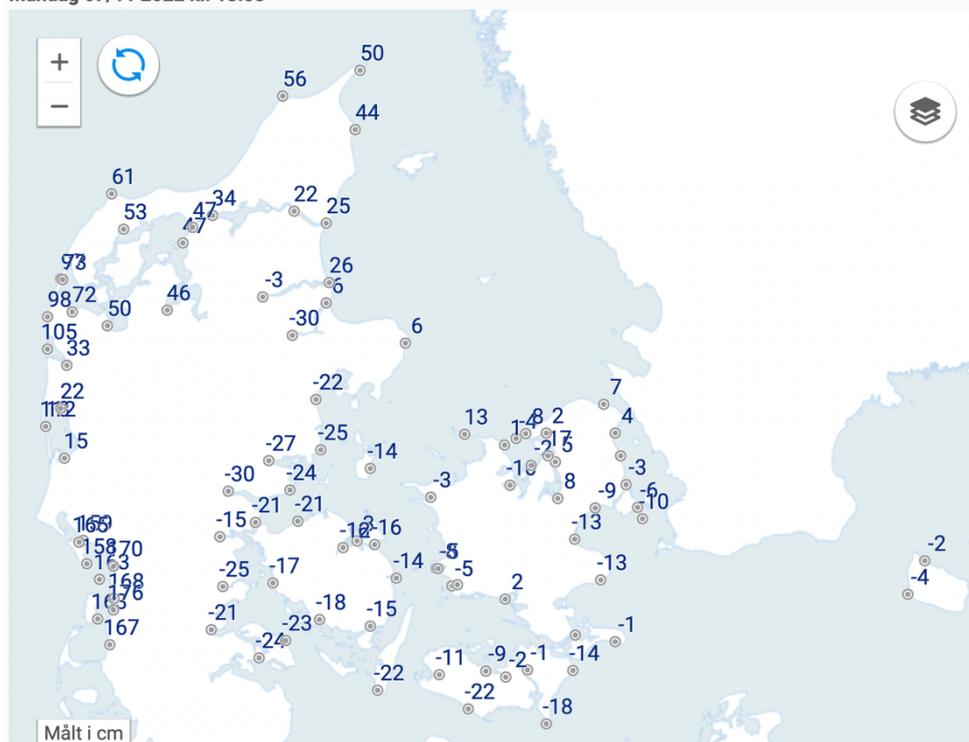
All data are, by a close co-operation between all the authorities, collected in real time and the instantaneous sea level observations are displayed in real time at DMI's webpage:

<https://www.dmi.dk/vandstand/>

Different types of instruments are in operation in Denmark:

- acoustic type
- TD instrument
- Bobble sensor
- pulse radar

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Data for PSMSL:

Data from the following 17 Danish stations, operated by DMI, are available through PSMSL.

These 14 tide gauges are operational stations:

130/001 Gedser	54 34 N	11 56 E
130/011 Rødbyhavn	54 39 N	11 21 E
130/016 Tejn	55 15 N	14 50 E
130/021 København	55 42 N	12 36 E
130/031 Hornbæk	56 06 N	12 28 E
130/041 Korsør	55 20 N	11 08 E
130/051 Slipshavn	55 17 N	10 50 E
130/062 Fynshav	55 00 N	09 59 E
130/071 Fredericia	55 34 N	09 45 E
130/081 Aarhus	56 09 N	10 13 E
130/091 Frederikshavn	57 26 N	10 34 E
130/101 Hirtshals	57 36 N	09 58 E
130/111 Hanstholm	57 07 N	08 36 E
130/121 Esbjerg	55 28 N	08 26 E

These three tide gauges have stopped and only historical data are available:

130/018 Hammerhavn	55 17 N	14 45 E
130/019 Christiansø	55 19 N	15 11 E
130/061 Mommark	54 56 N	10 03 E

The tide gauges in Esbjerg and Aarhus are equipped with a permanent GPS station. Stations in Fynshav, Gedser, Hirtshals, København and Tejn are equipped with permanent GPS stations in the vicinity of the stations.

Data for NEAMTWS:

Data from the tide gauge station in Hirtshals (North Sea coast) are available for the IOC Sea Level Station Monitoring Facility in real time. Sampling interval is 10 minutes.

Greenland

DMI and the previous Danish Maritime Safety Administration (DaMSA) ended all sea level activities in Greenland in 2002 and 2004, respectively. This included the GLOSS GCN stations 225 Nuuk (DMI) & 228 Ammassalik (DaMSA). All available data from Nuuk and Ammassalik have been delivered to the GLOSS and PSMSL database. Furthermore, DaMSA has sent all available data up to 2004 from all their 8 stations to the GLOSS database.

DTU Space operates three stations in Greenland:

- Qaqortoq (PSMSL 980/045).
- Thule. Since 2001 and upgraded to international standards in 2006.
- Illoqqortoormiit. Since 2006.

In 2014 DTU Space re-installed and resumed operation of the Nuuk tide gauge (GLOSS ID 225).

At all four stations permanent GPS are jointly collocated. Instruments: Aanderaa WLR7 instruments.

Data for GLOSS:

All four stations contribute to the GLOSS Core network, currently only to the fast delivery data center:

299 QAQORTOQ	60 43N	046 02W
808 THULE	76 N	068 W
809 SCORESBYSUND	70 29N	021 59W
820 NUUK	64 11N	051 43W

Delivery of research quality data to UHSLC as well as PSMSL are in progress.

Data for NEAMTWS:

Data from all four tide-gauge station in Greenland are available for the IOC Sea Level Station Monitoring Facility in real time. Sampling interval is 5 minutes.

Faroe Islands

The GLOSS station (GCN 237) Torshavn (DMI):

The station, of floating/well device type, operated by DMI, stopped during winter 2006 due to technical failure. The Faroe Islands have taken over the responsibilities for meteorological measurements and DMI has no influence on the status of the tide gauge in Torshavn anymore.