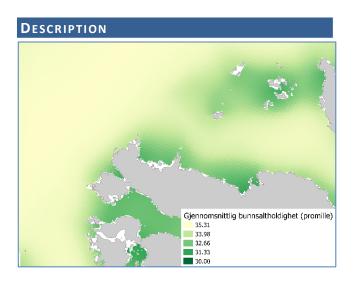






Product sheet: NorKyst-800 average salinity



The dataset represents 10 years averaged values of salinity at the surface, water masses (intervals for 5m, 15m, 30m, 50m, 100m, 150m, 200m and 250m), as well as at the seabed.

With the current model setup, the distance from the seabed goes from a few cm in shallow water up to 1.5m when the total depth is 100m or more.

Salinity is given in parts per thousand.

PURPOSE/APPLICATION

Salinity in the sea is an important factor indicating which water mass is dominant, and this in turn will have an impact on the distribution of different marine species.

OWNER/CONTACT PERSON

Institute of Marine Research

Computer technical: datahjelp@hi.no **Referee:** Jon Albretsen, jon.albretsen@hi.no

DATASET RESOLUTION

Resolution: 800m

Location accuracy (meters): 800m

EXTENT INFORMATION

The dataset covers the coast of mainland Norway and large parts of the sea area beyond.

The dataset consists of a total of 10 levels of depth, from surface to seabed.

SOURCES AND METHOD

Bottom salinity is derived from a ten-year simulation with a three-dimensional, hydrodynamic flow model. The numerical current model underlying ROMS (http://myroms.org), is the Institute of Marine Research's main model for Norwegian coastal and fjord areas and has a spatial resolution of 800m x 800m horizontally and 35 vertical, terrain-following calculation levels. The simulation period is a decade from 2013-2022. Based on hourly values, the calculated mean value is calculated.

A more thorough description can be read in Asplin et al. 2020

(https://link.springer.com/article/10.1007/s10236-020-01378-0)

og Albretsen m.fl. 2011
(https://imr.brage.unit.no/imr-xmlui/bitstream/handle/11250/113865/FoH_2011
02.pdf?sequence=1&isAllowed=y).

UPDATING AND UPDATING

The oceanographic map products are continuously updated as new input data or new modelling methods that prove to be more realistic are adopted.

Updates do not take place periodically.

Status

Last update: 01.01.2024





WATER SALINITY v1.0

DELIVERY DESCRIPTION

Format (version 1.0)

• Geotiff

Projections

UTM SON 33 (UGS84)

Access restrictions

Information made available under <u>CC BY 4.0</u> When using information from the Institute of Marine Research (IMR), the following reference must always be provided:

"Contains data under CC BY 4.0 made available by the Institute of Marine Research (IMR)."

Service

The map is available as services (<u>WMS, WCS</u>) and for download in a variety of formats from HI's geoserver https://kart.hi.no/data

For questions about use, feel free to contact us on datahjelp@hi.no

LINKS

- Link to the numerical ocean model ROMS
- <u>Link to technical report on the coastal model</u>
 NorKyst800
- <u>Link to application of NorKyst800</u>