



Kartverket

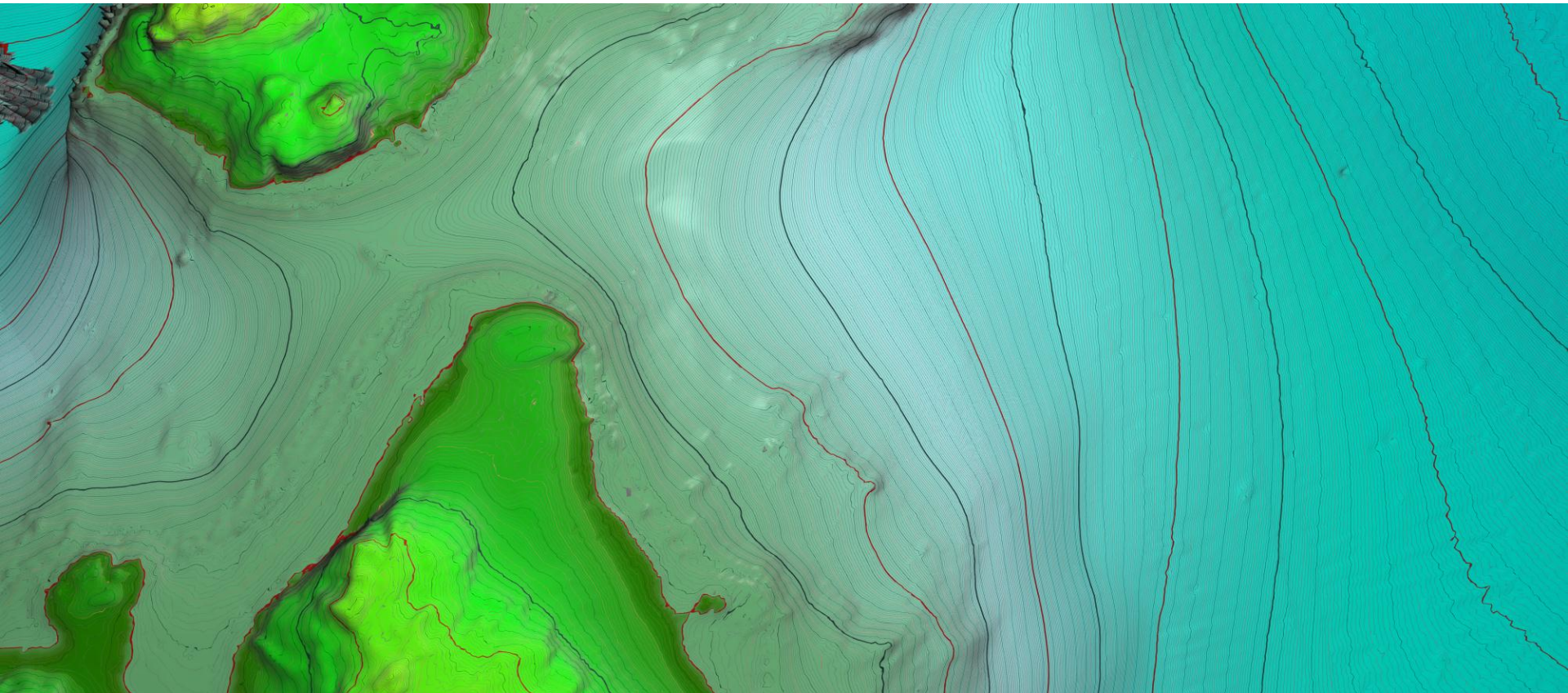
TWLWG7

An update from the Norwegian
Hydrographic Service

Hilde Sande

Norwegian Mapping Authority, Hydrographic Service

Silver Spring, April 2015



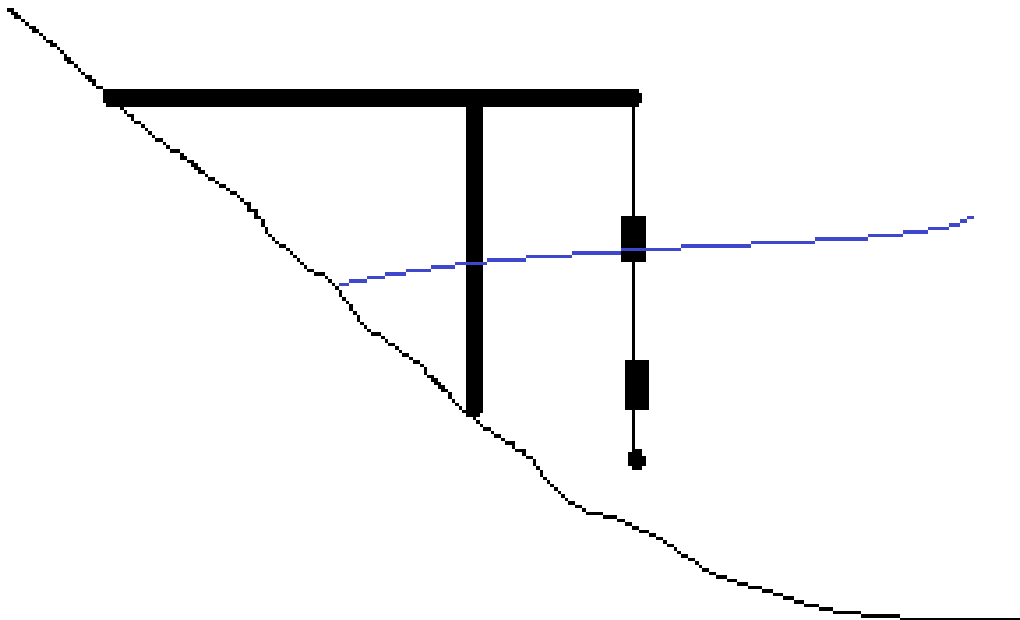
Tidal gauges

Permanent and short term measurements



Temporal tidal gauges

New approach with two sensors

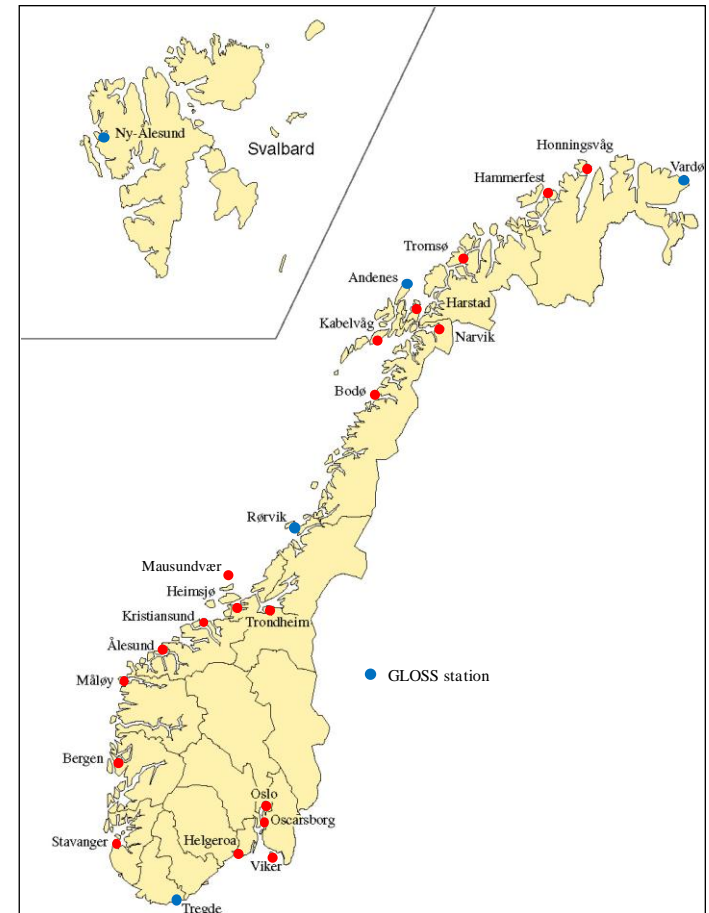


Permanent tidal gauges

23 along the coast
+ Ny-Ålesund, Svalbard

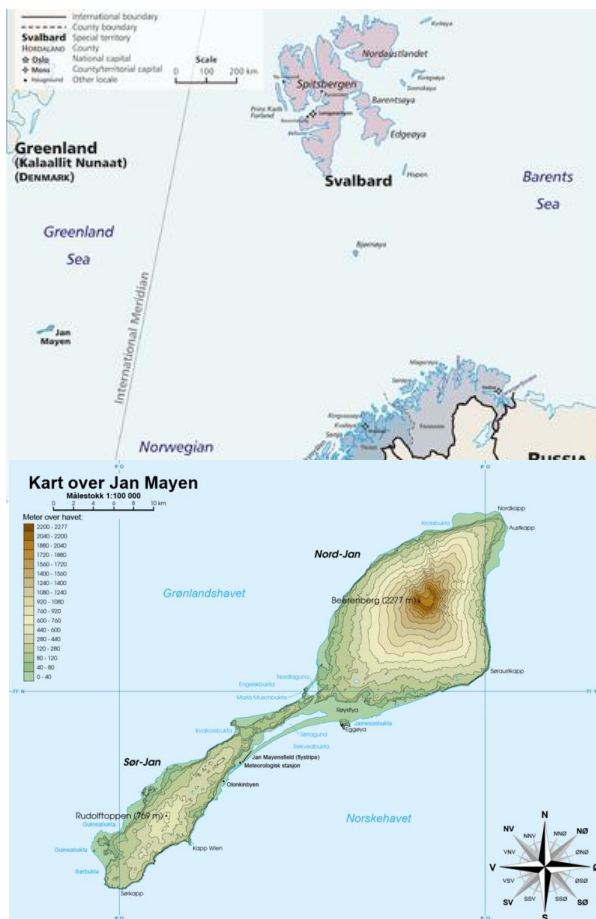
Wish list:

- ✓ Jan-Mayen
- Bjørnøya



Jan Mayen

Where and why?



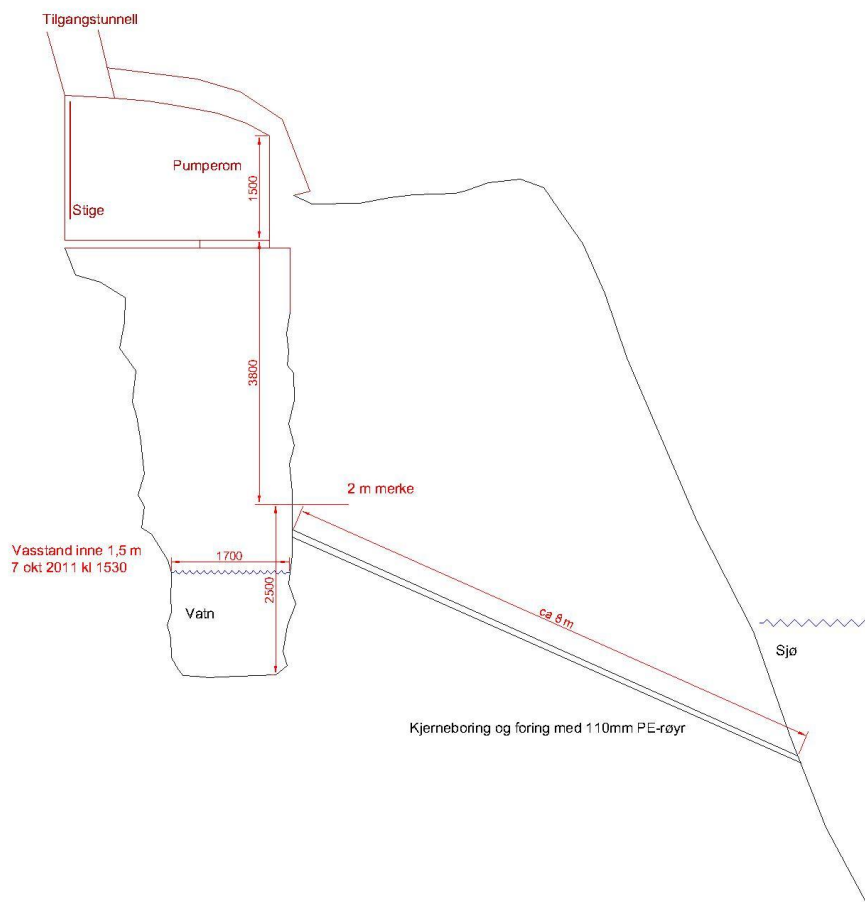
Jan Mayen

How?



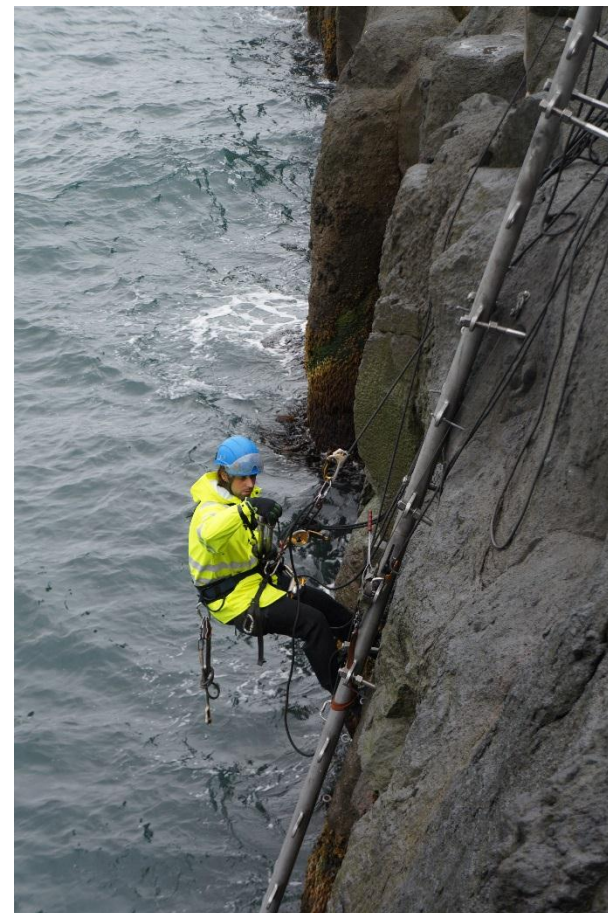
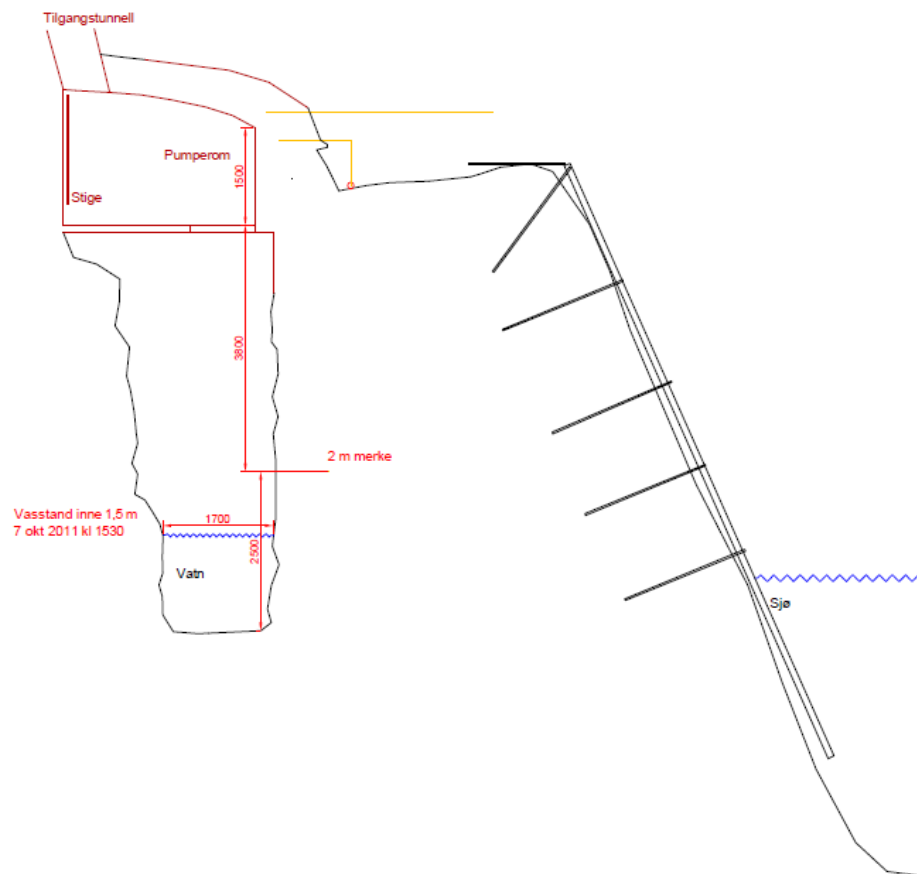
Jan Mayen 2013

Attempting to connect water well to the sea



Jan Mayen 2014

Attempting to secure a pipe to the rocks



Jan Mayen tide gauge

Collecting data since August 2014



Online water level data

kartverket.no/sehavniva

- Now in English
- Search: name, position or map
- Tides, observed water level in «real time» and waterlevel forecast for permanent stations
- Adjusted tides, «observations» and forecast for almost all other places
- Reference levels, statistics and land up lift, future sea level changes in planning

Se havnivå provides information about sea level, tide tables, reference levels, and land uplift for the Norwegian coast.

➤ [Se havnivå startpage](#)

➤ [Tide Tables](#)

➤ [Open Data](#)

★ My Places

You haven't stored any favorite place or location yet

Water level and tidal information

Place

Position

Map

Type name of place

Search

Stavanger (Rogaland)

★ Add to My Places

</>

Closest station: [Stavanger](#) | Time difference: 0 min | Height Correction factor: 1.00

Tides

Water level

Land uplift

Statistics

REFERENCE LEVEL

- ☒ Chart Datum
☐ Mean Sea Level
☐ NN 1954

CONTENT IN TABLE

- ☒ High and low water
☐ Every hour
☐ Every 10 minutes

TIME PERIODE

From: 20 Apr, 15

To: 23 Apr, 15

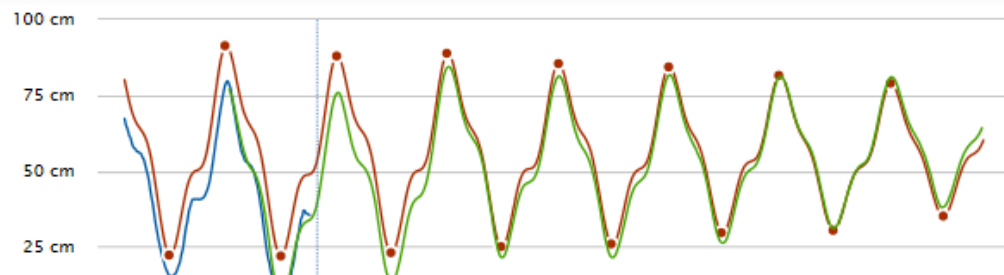
Show

DOWNLOAD

PDF

Other formats

Next 4 days



API for water level data

http://api.sehavniva.no/tideapi_en.html

- Xml format (also some data as pdf or text)
- Tides, observations, forecast
- Reference levels, return levels
- Statistics
- Constituents

Location data

Position Latitude <input type="text" value="58.974339"/> Longitude <input type="text" value="5.730121"/>	Datatype <input checked="" type="radio"/> All <input type="radio"/> Observations <input type="radio"/> Predictions <input type="radio"/> High and low	Return type <input checked="" type="radio"/> XML <input type="radio"/> PDF file <input type="radio"/> Text file	Interval <input checked="" type="radio"/> 10 min <input type="radio"/> 60 min
Time interval From time <input type="text" value="2015-04-20T00:00"/> To time <input type="text" value="2015-04-21T00:00"/>	Reference level <input checked="" type="radio"/> Chart datum <input type="radio"/> Mean sea level <input type="radio"/> NN1954	Language <input checked="" type="radio"/> Nynorsk <input type="radio"/> Bokmål <input type="radio"/> English <input type="radio"/> Deutsch <input type="radio"/> Netherlands	Daylight savings time <input checked="" type="radio"/> Do not use dst <input type="radio"/> Use dst
Place name <input type="text"/>			Time zone <input checked="" type="radio"/> Not selected <input type="radio"/> UTC+1 <input type="radio"/> UTC

Station type

☒ Permanent gauges
☐ Ocean current stations

[Submit](#)

Available file formats

Language

☒ Nynorsk
☐ Bokmål
☐ English
☐ Deutsch
☐ Netherlands

[Submit](#)

Location levels

Position Latitude <input type="text" value="58.974339"/> Longitude <input type="text" value="5.730121"/>	Reference level <input checked="" type="radio"/> Chart datum <input type="radio"/> Mean sea level <input type="radio"/> NN1954	Language <input checked="" type="radio"/> Nynorsk <input type="radio"/> Bokmål <input type="radio"/> English <input type="radio"/> Deutsch <input type="radio"/> Netherlands	Return type <input checked="" type="radio"/> XML <input type="radio"/> PDF file <input type="radio"/> Text file
Place name <input type="text"/>			Submit

Suggested standard levels

Language

☒ Nynorsk
☐ Bokmål
☐ English
☐ Deutsch
☐ Netherlands

[Submit](#)

Station levels

Station code <input type="text" value="TRD"/>	Language <input checked="" type="radio"/> Nynorsk <input type="radio"/> Bokmål <input type="radio"/> English <input type="radio"/> Deutsch <input type="radio"/> Netherlands	Return type <input checked="" type="radio"/> XML <input type="radio"/> PDF file <input type="radio"/> Text file
Reference level <input checked="" type="radio"/> Chart datum <input type="radio"/> Mean sea level <input type="radio"/> NN1954		

[Submit](#)

Constituents ROMS model

Station code

Latitude

Longitude

[Submit](#)

Observation time

Station code

[Submit](#)

Available statistics

Station code

[Submit](#)

Tide table in pdf format

Position Latitude <input type="text" value="58.974339"/> Longitude <input type="text" value="5.730121"/>	Language <input checked="" type="radio"/> Nynorsk <input type="radio"/> Bokmål <input type="radio"/> English <input type="radio"/> Deutsch <input type="radio"/> Netherlands	Year <input type="text" value="2014"/>
Place name <input type="text"/>		Submit

Month mean

Station code

From year

To year

[Submit](#)

Constituents

Station code

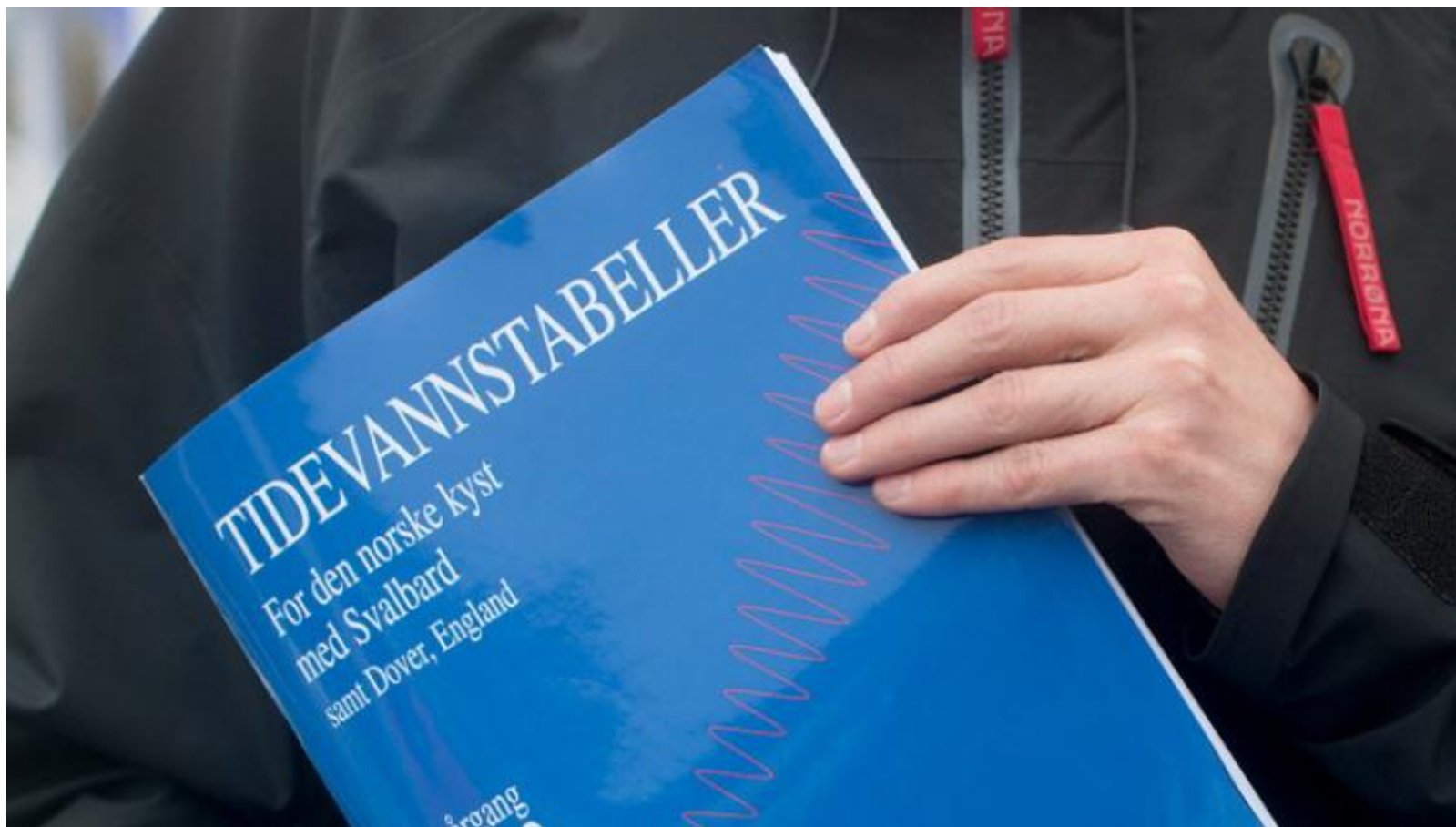
[Submit](#)

Available languages

[Submit Query](#)

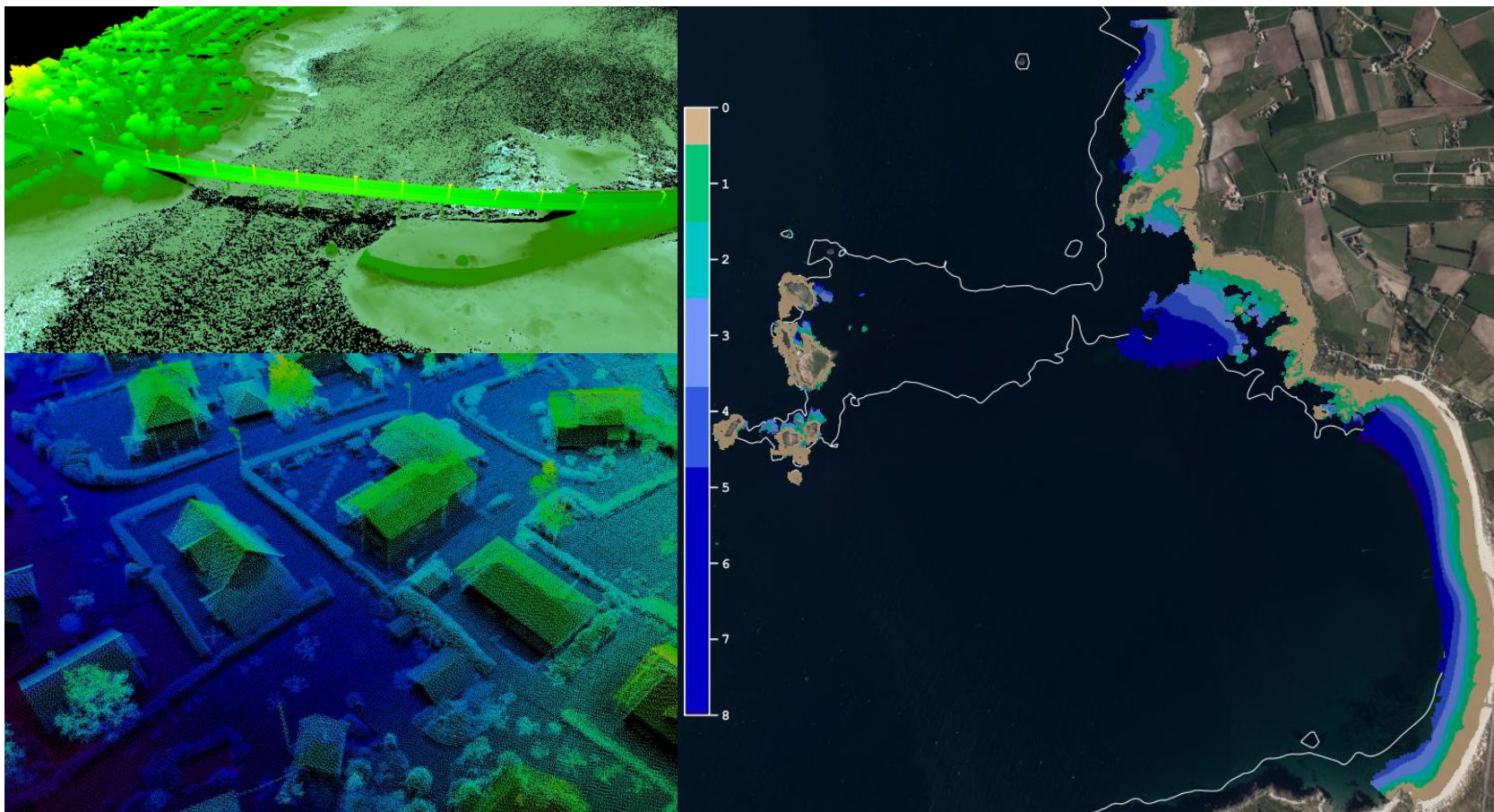
Tide table

Not printed anymore, only as PDF-file online



TopoBaty 2014

Testing survey by green laser in coastal areas



Thank you!

www.kartverket.no

hilde.sande@kartverket.no



Solastranda. PHOTO: ØYVIND TAPPEL



Kartverket