



**FLUTNINGALANDIÐ
ÍSLAND**

**HARPA, KALDALÓN
5. OKTÓBER 2016, 9-13:30**



THE FINNAFJORD PORT PROJECT

Status and Outline

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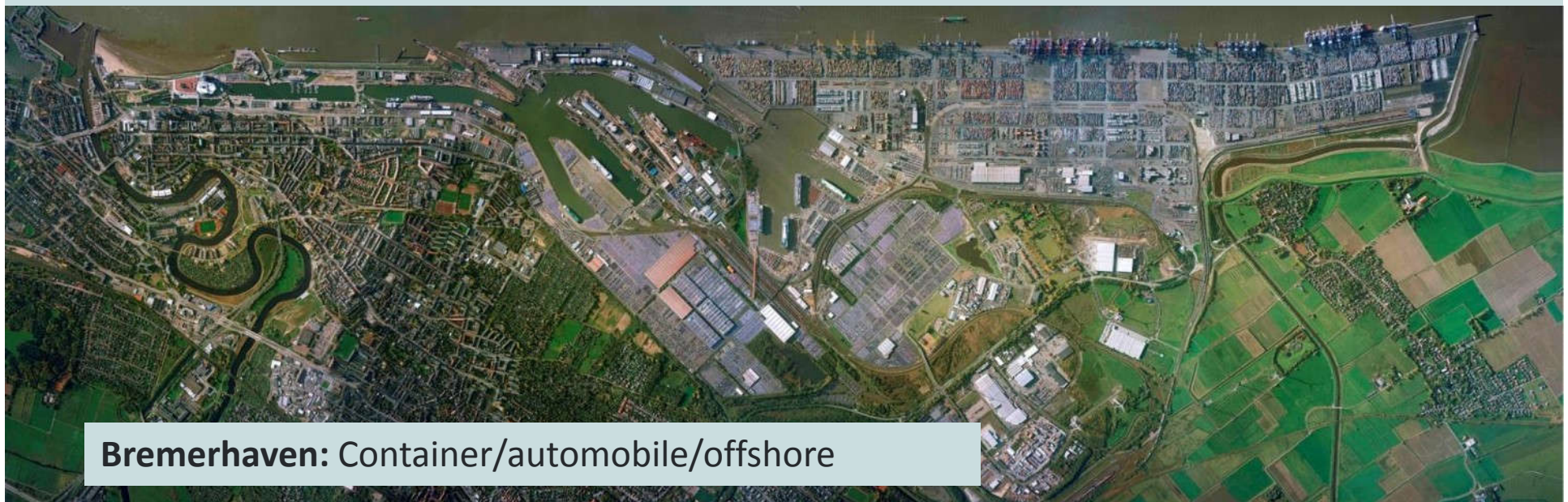


Finnafjord

Harbour facilities in Bremen and Bremerhaven



Bremen: Break bulk/industrial port



Bremerhaven: Container/automobile/offshore

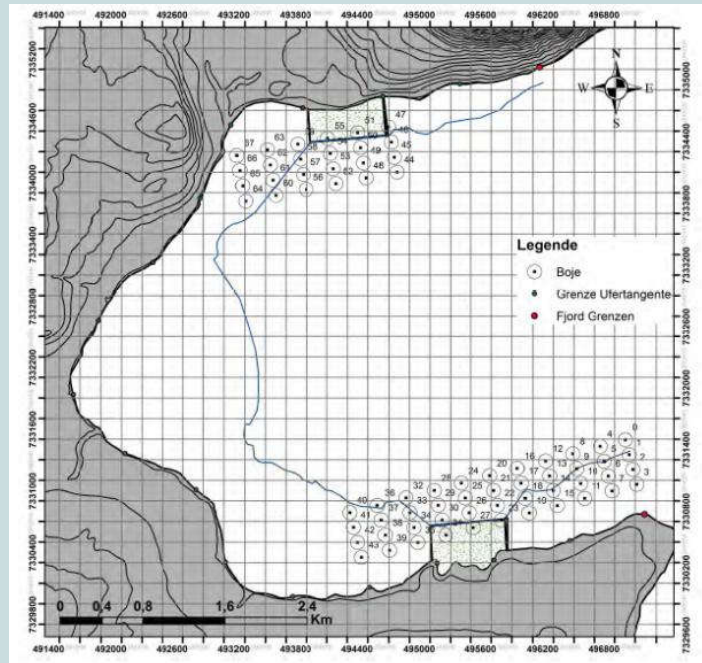
Trial pits

<p>X: 673841 Y: 631716 Z: 23,5 m.a.s.l</p> <p>Organic soil with rounded stones BG: Gravel with sand and large rounded stones (same as in FG03). Considered non-frost sensitive.</p> <p>FG: Not reached, pit too unstable to excavate deeper No water</p>	
<p>X: 674078 Y: 631726 Z: 27,5 m.a.s.l</p> <p>Organic soil with large rounded stones BG: Gravel with sand and large rounded stones. Considered non-frost sensitive (S)</p> <p>FG: Not reached, pit too unstable to excavate deeper No water Sample, labeled FG09BB</p>	

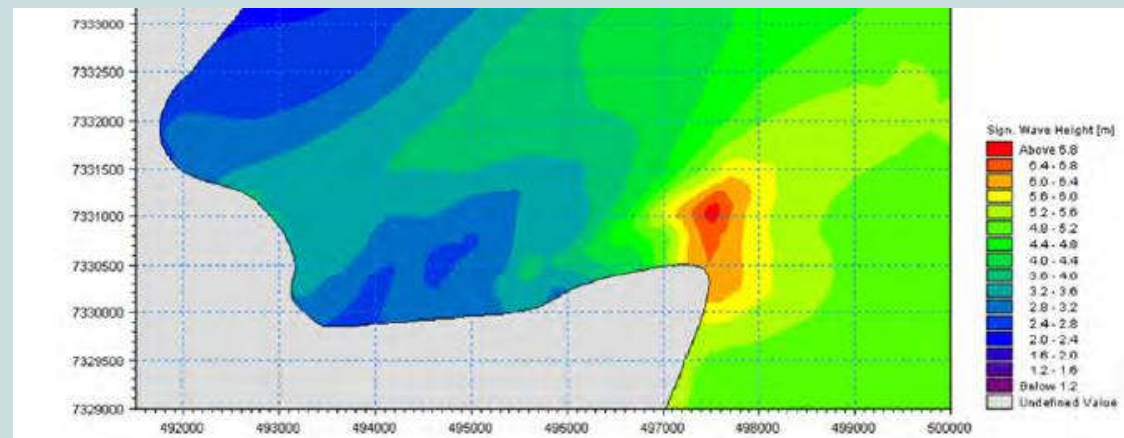
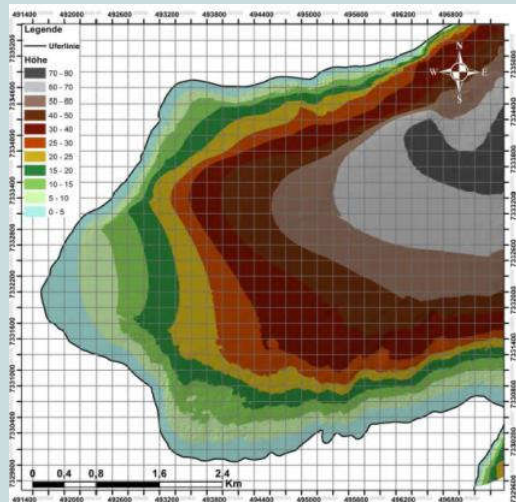
- Finnafjörður area is a vast quantities of loose sediments that were deposit at end of last Ice Age.
- The trial pits show a large amount of gravel qualified for construction.
- In the western part of Gunnólfsvík, firm bedrock was not reach due to thick sediments and unstable pit walls.



Waves and bathymetry – numerical modelling



- Evaluation of measurement data in Finafjord (Bathymetry)
- Numerical modeling of significant wave-height, protected by 40km+ peninsula of Langanes to the North
- Positioning of potential location for berthing
- Design wave-height for breakwater



What does the Project Address?

- **Base port for oil & gas E&P operations**

- Support site for prospecting activities in Eastern Greenland (consolidation and processing).
- Base harbour for E&P operations in Dreki Area.
- Site for LNG liquefaction plant/terminal.

- **Hub port/way port for trans arctic shipping**

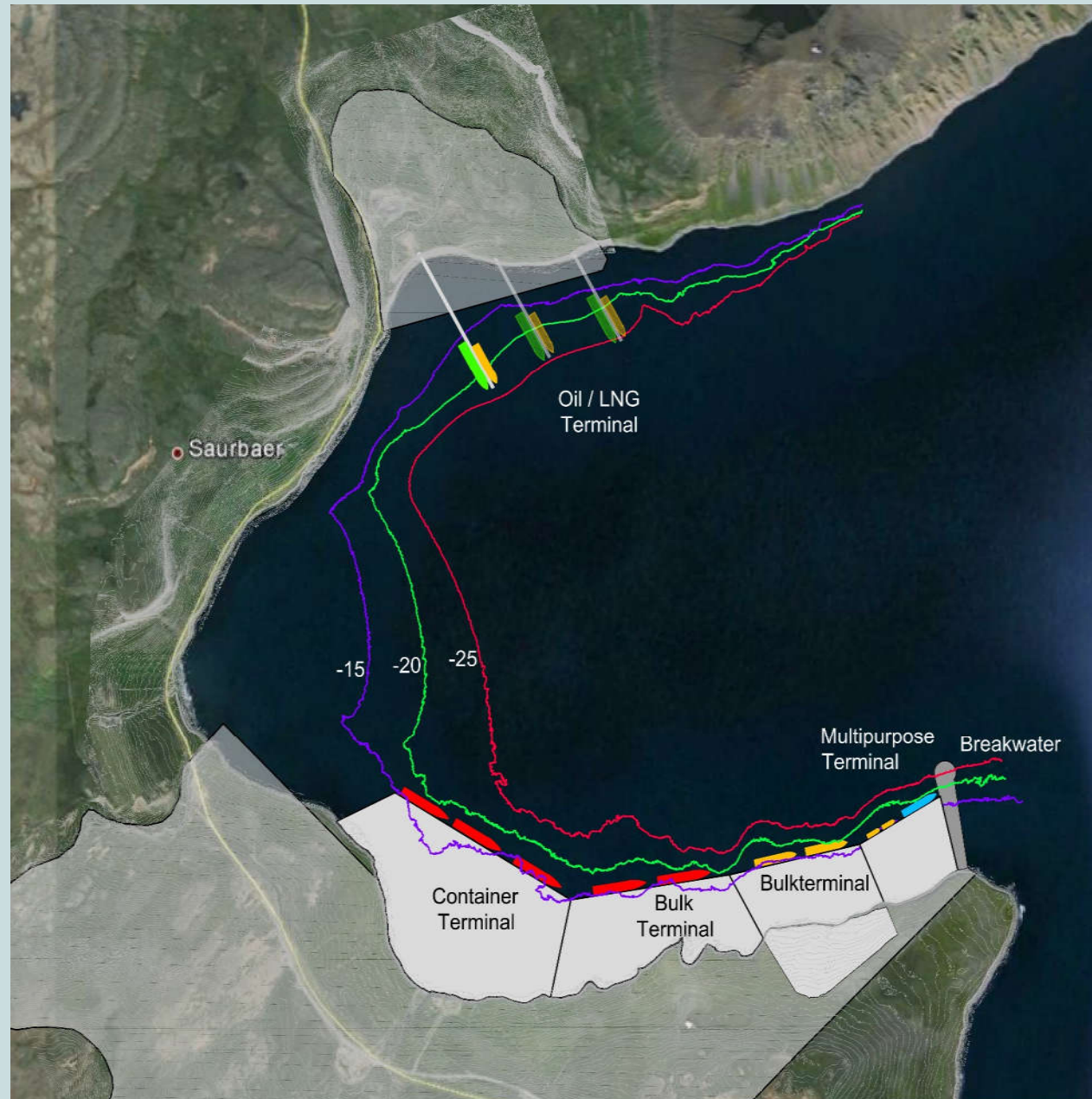
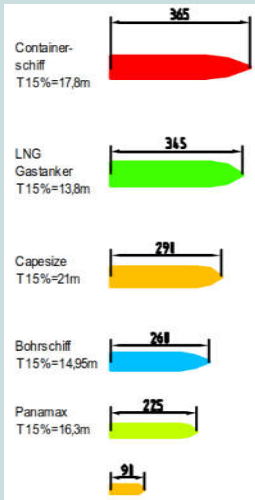
- Exploration of the potentials of receding ice cover in the Arctic for shipping along the Northern Sea Route or the Central Pole Rout.
- Access point to Northern Europe.
- Transshipment to North America.

- **Offshore / Arctic shipping service port**

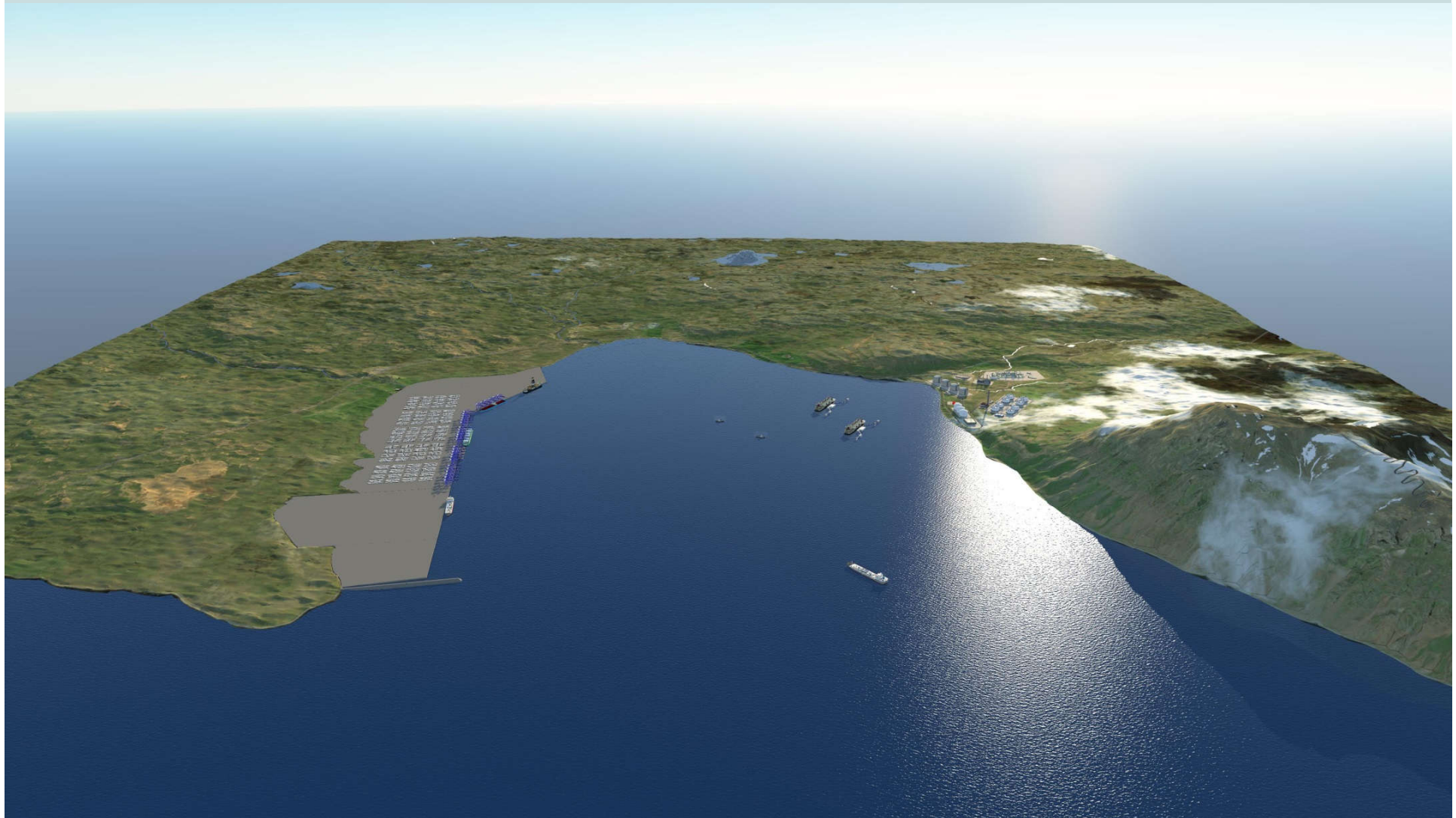
- Search & Rescue base port.
- LNG bunkering facility.



Maximum Development - Development (with breakwater)



Maximum Development (with breakwater)



Masterplan and airport at Þórshöfn



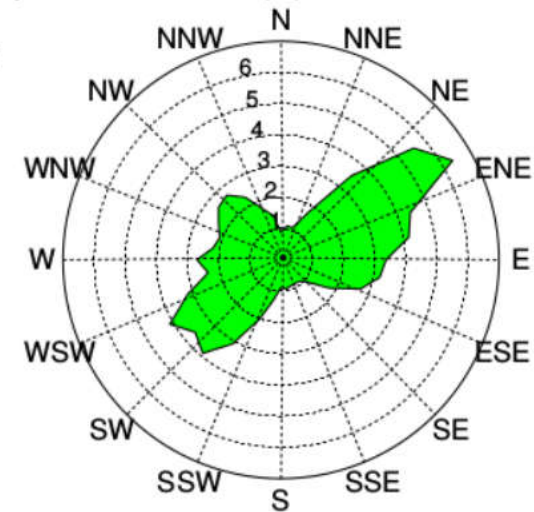
Two weather stations in operation since August 2015



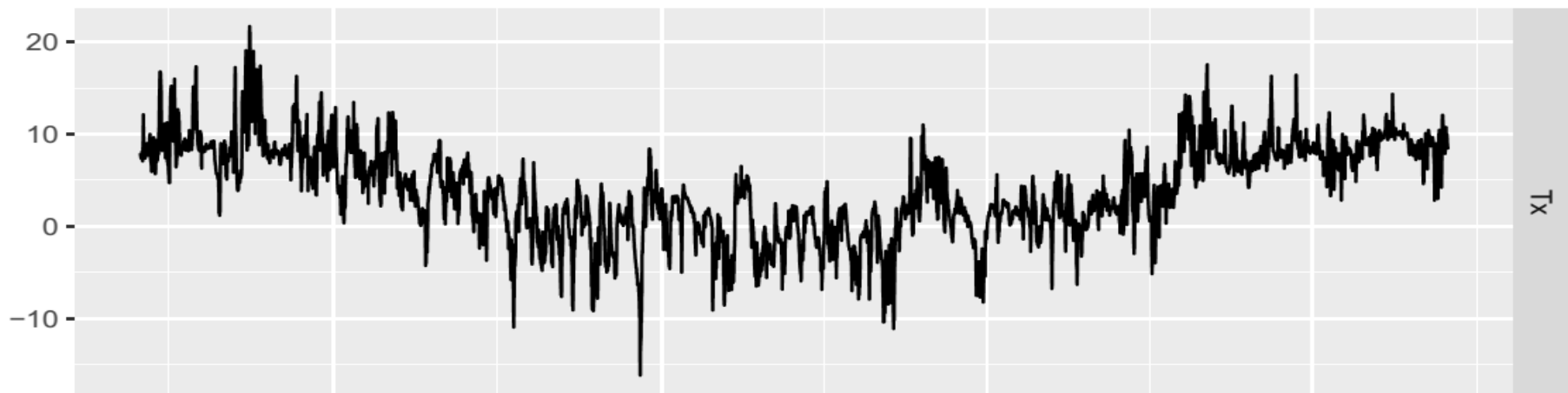
Finnafjörður – south station

Frequency of wind directions (%), 2015-08-08 – 2016-08-07

Automatic station
No. observations: 52575
Calm: 0.8%
Variable winds: 0%



Finnafjörður – South: Hourly mean temperature





**Flat and dry landmass
Location for airborne cargo???**



Thank you

