



Kartverket

Communicating long term sea level changes

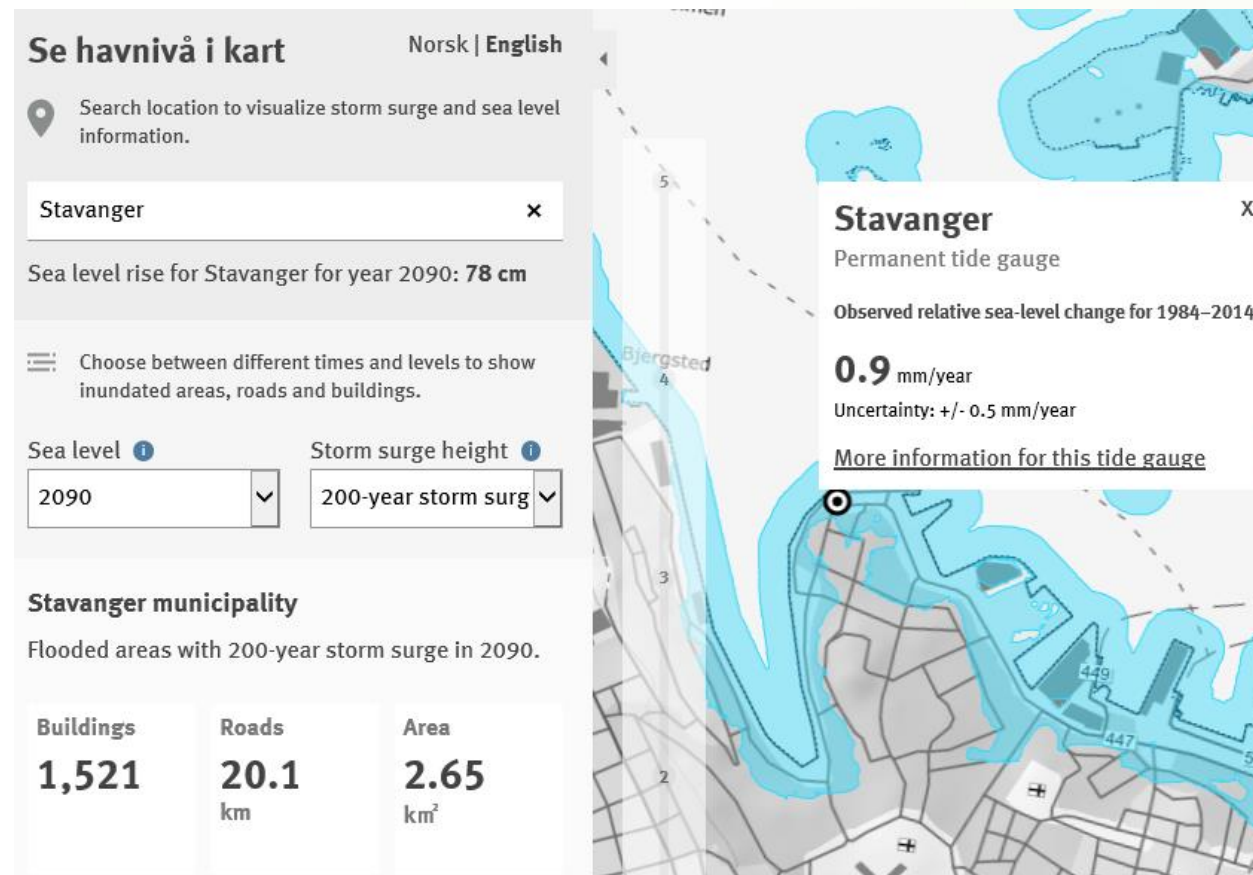
*TWCWG4, Busan
Hilde Sande Borck*



Visualization of future sea level

- Extreme water levels at present and future sea level
- Includes trends from permanent tide gauges
- Useful tool to identify areas of risk
- Some people claim we appeal to fear

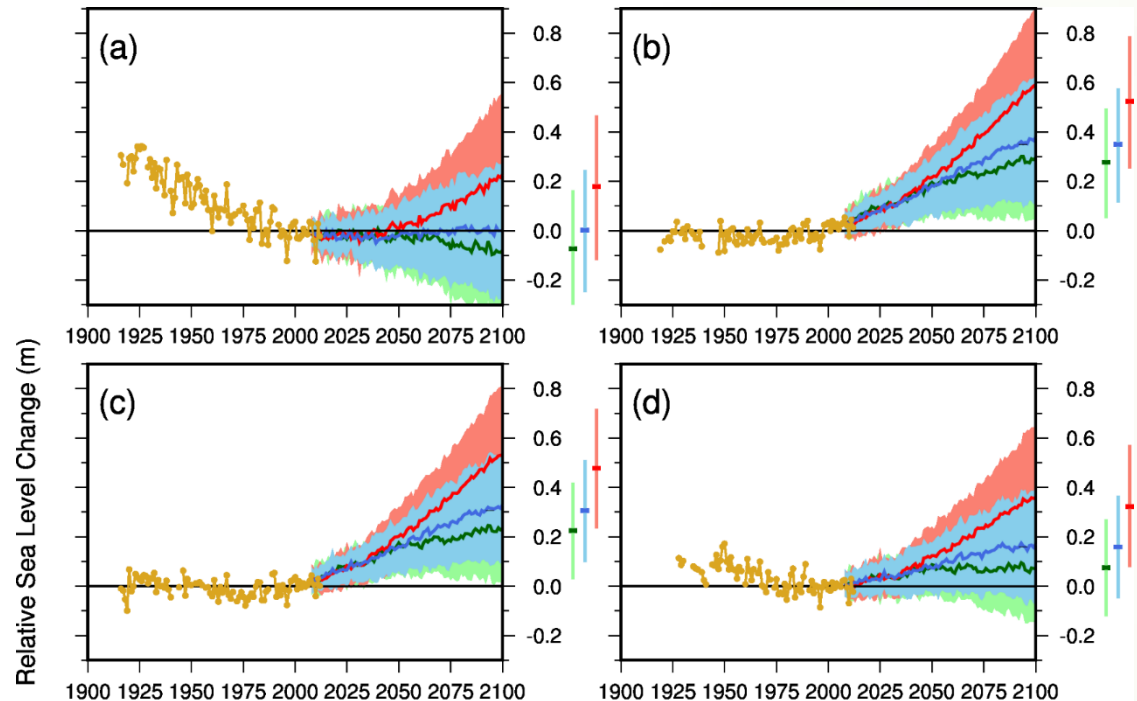
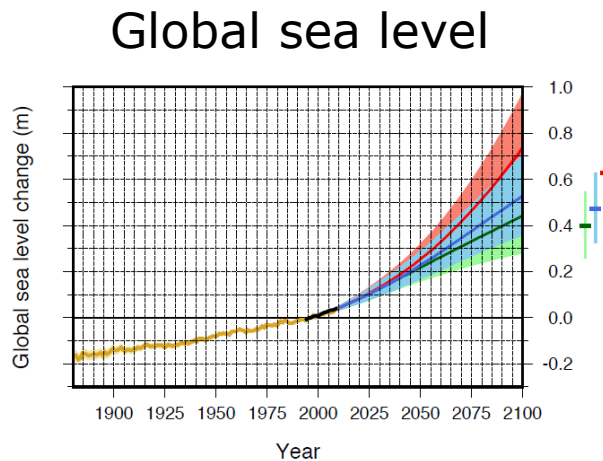
<https://www.kartverket.no/en/sehavniva/visualize-sea-level/>



Why do they claim we appeal to fear:

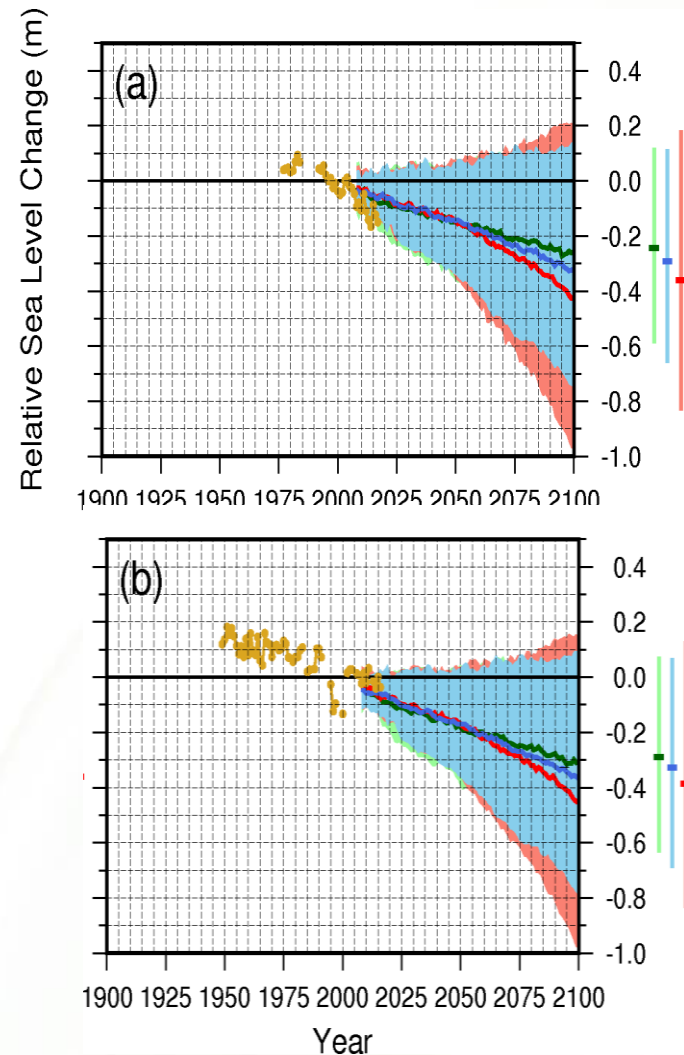
Observed sea level is not rising

Observed and projected sea level for Norway

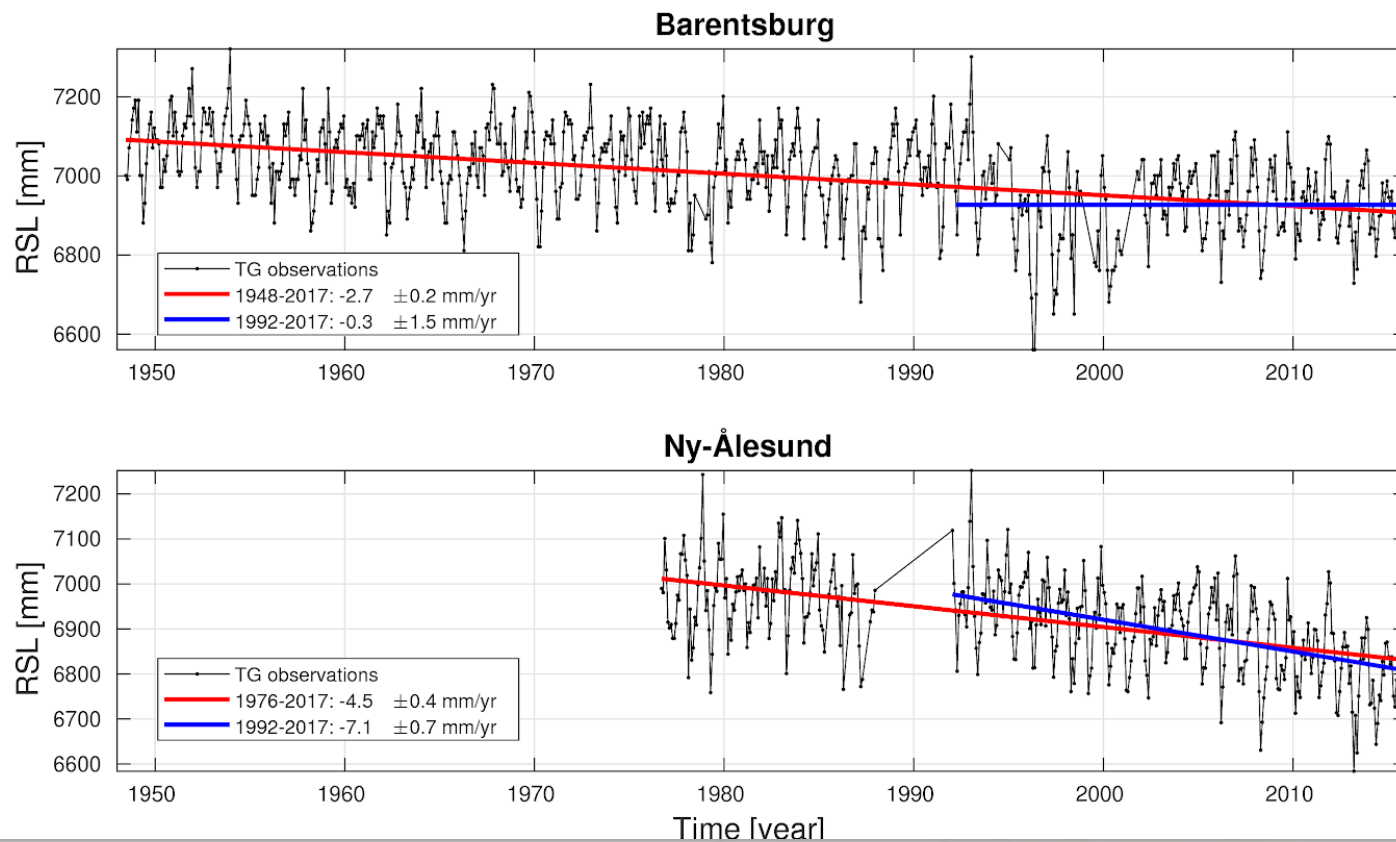


Projected sea level at Svalbard

- Observed sea level is decreasing
 - High land uplift
- Projected sea level is also decreasing
 - Reduced gravitational pull and land uplift due to local ice mass losses



Observed sea level at Svalbard



Improving data quality

«The reports are based on false data»

«We were right - you tried to scare us»

- Improving data quality by removing systematic errors may change the trends
- May lead to several versions of the same dataset available on different sites
- Results change even more with new analysis using new data and new models