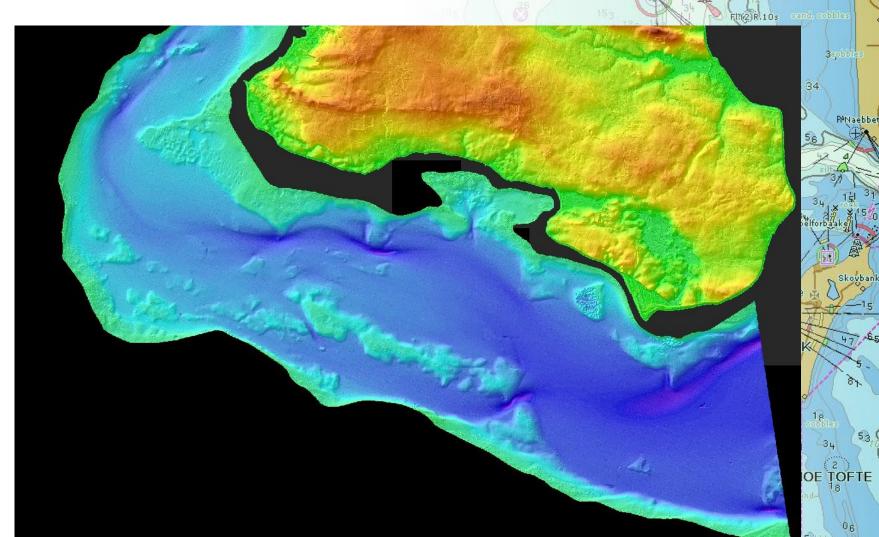
Why bathymetrisk LiDAR

Closing the gap...



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Lerhoved

25BOEG

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156 deg

Egholm Flak No 30

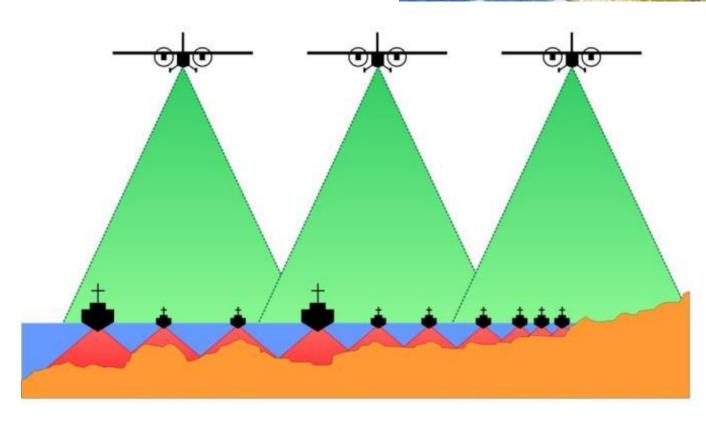
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Why bathymetrisk LiDAR

Closing the gap...

Buzz-word: Integrated Coastal Zone Management





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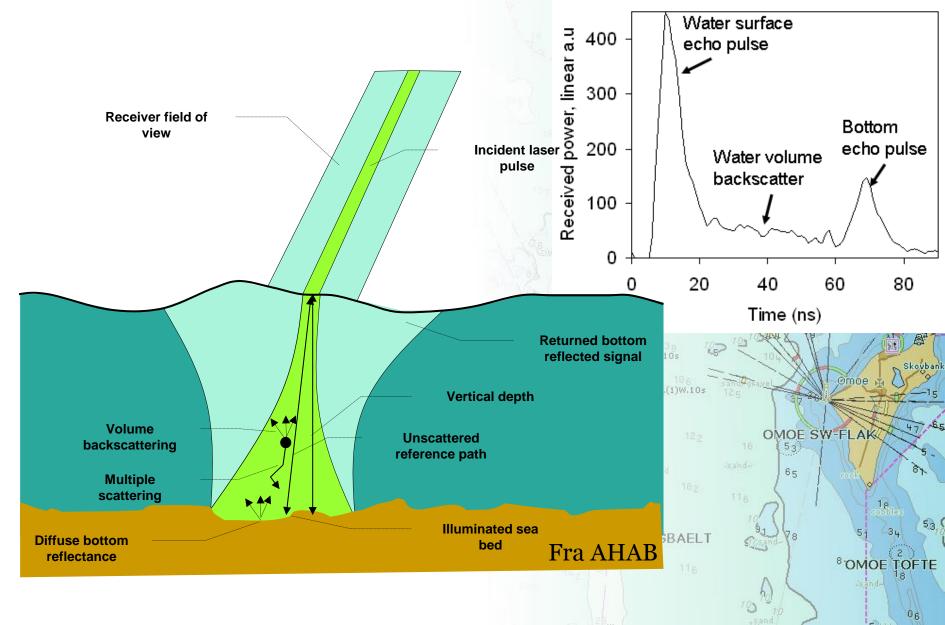
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How: Tecnic behind Bathymetric LiDAR⁶²



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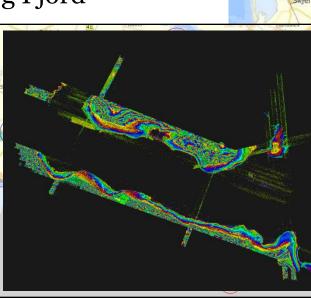
Lerhoved

Where: Test area

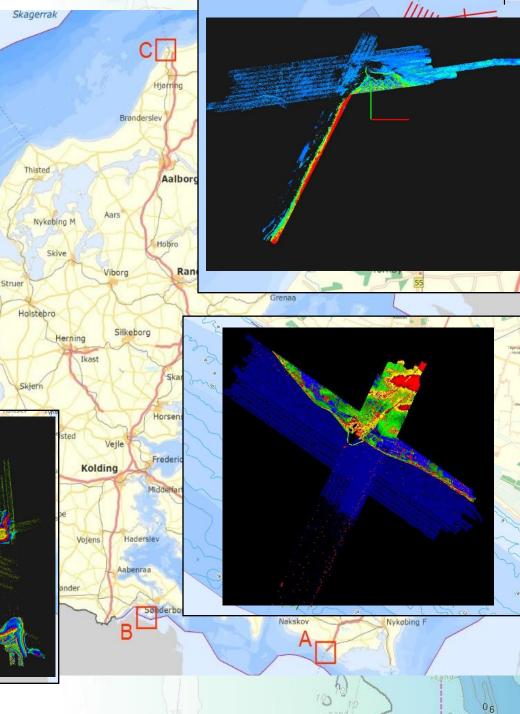
Three different places

Three different environment

- Rødby
- Flensborg Fjord
- Hirtshal



nakøbina

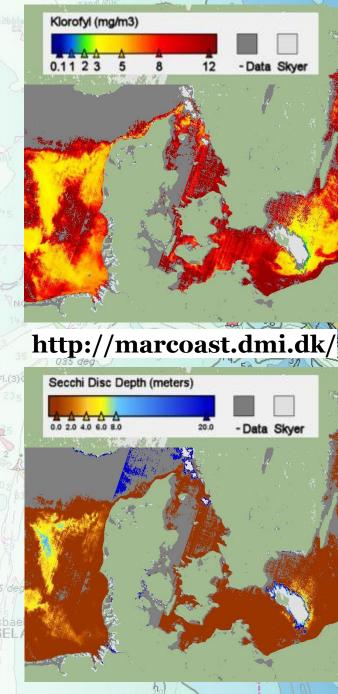


Challenges

Operators and system maturity

Local water and whether problems

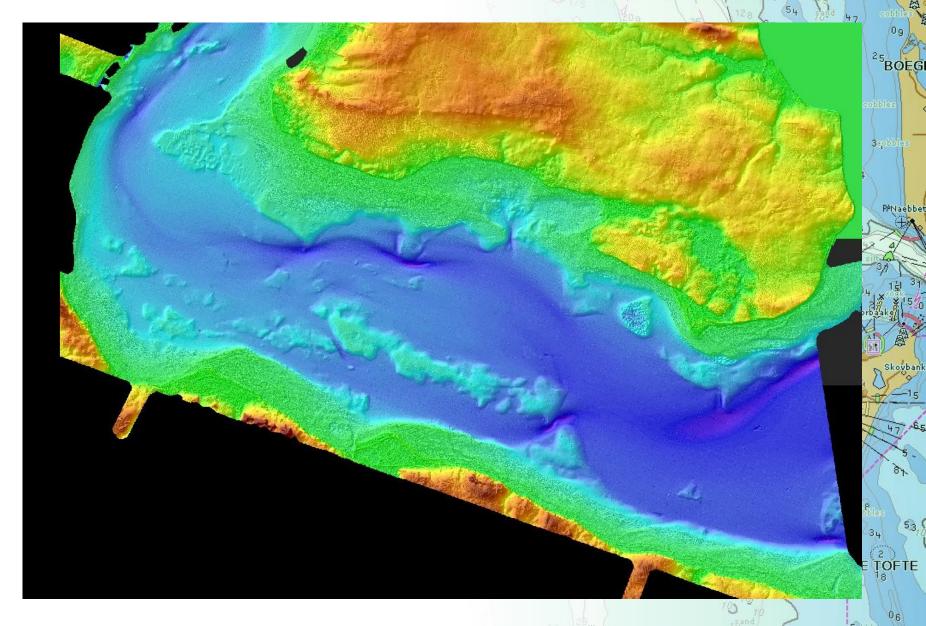
Rødby	Hirtshals	Flensborg
April 2011 –	April 2011 –	July 2012 –
Algae bloom	Algae bloom	Success
June 2011 –	June 2011 –	6w 37
Technical issue	Technical issue	
February 2012 -	February 2012 -	
Low clouds	Low clouds	
April 2012 -	April 2012 –	₹1.(2)/6.5 <i>∉</i>
Success	Strong winds	
	and waves	75 FL(2)R.5=
	July 2012 –	13:
	High turbidity	10s 0
	August 2012 –	DW 40, Langeland
	Partly Success	LAN
	(Chiroptera)	and a second second



Resultater: Flensborg Fjord – en samlet model

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Resultater: Rødby

LiDAR h	avoverflad

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a harry of a call alpha all the balance for a state of the

	a 19 m a she anna a faright an anna an a	LiDAR bund
Points per m2	Depth	
0.20 ppm2	6.0 m	
0.21 ppm2	7.5 m	
0.22 ppm2	8.5 m	
0.23 ppm2	9.0 m	
0.19 ppm2	12.0 m	
0.007 ppm2	13.0 m	

a have a construction of the second of the

Multibeam bund

LiDAR bund

Results: A long list of questions

How is the light spreading in water? When did light reflects from bottom? What happens inside the black system boxes? What kind of algorithm is used? When can one expect no signal? How big is the footprint? Can you ignore holes in data? Salinity? Speed of light though watercolumn? How to verify data? How to combine LiDAR and Multibeam?

What does we register? What kind of objects can be observed?4 How early can you migrate multibeam and LiDAR? Optimal migration with multibeam and existing height models? Omoe Kabelfor **Optimal dataprocessing?** Use of data besides hydrographi? Omóe OMOE SW-FLAK 65 ⁸ OMOE TOFTE

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7(2)R.10s

Lerhoved

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Egholm Flak No 30

What have we learned

Not a stand alone method... ... supplement to multi-beam

- Lowwater area in Denmark closing the gab
- Narrow routes in Grønland
- Plannning of multibeam
- Classification of the botton

