

· Improving offshore operators' efficiency and costs

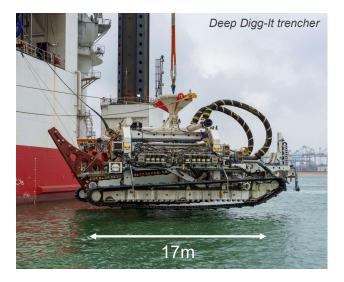
Offshore wind energy EMODnet bathymetry EMODnet geology

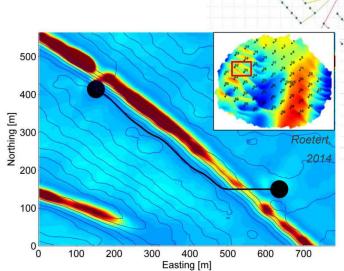
Borssele 3/4 farm: 77 turbines, 0.7 GW

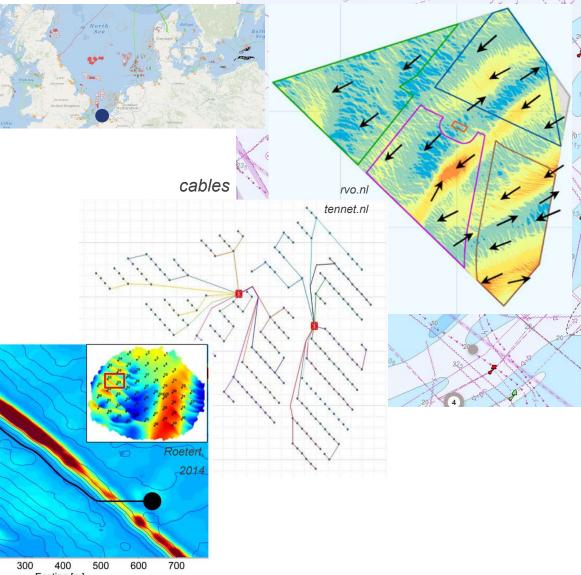
Example: Micro siting

Exact location of monopiles and cables optimized

- Prevent exposure due to moving sand waves _
- Cable burial *trencher* has preferred slopes
- Guarantee sufficient burial depth against anchors _







Enriching company data

Offshore wind energy **EMODnet physics**

Borssele 3/4 farm: 77 turbines, 0.7 GW

Example: Workability forecast

Workability determined by mixture of data sources

- Own fleet of TriAxys and WaveRider buoys
- Buoys can be broken due to
 - → Battery
 - \rightarrow Failure (leakage)
 - \rightarrow Collision with vessels
 - → Storms, adrift

With public buoys we can decrease uncertainty Public buoys provide fall back for our buoys Public buoys essential for the commercial forecasts We provide our buoys data NRT to forecasters



TriaAxys buoy spectral wave data



Gerben J. de Boer | Van Oord EMODnet Marine Data for the offshore renewable energy sector 20 sep 2022





Questions: gerben.deboer@vanoord.com



