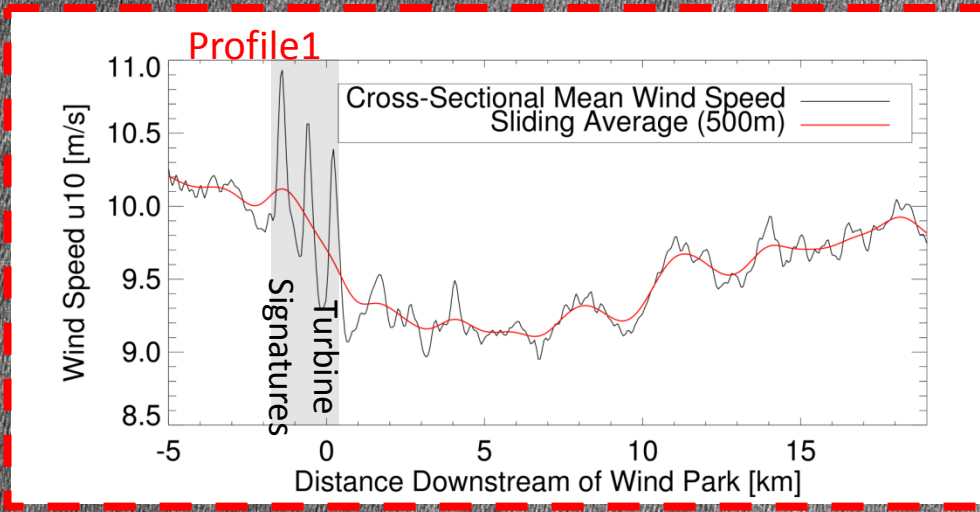
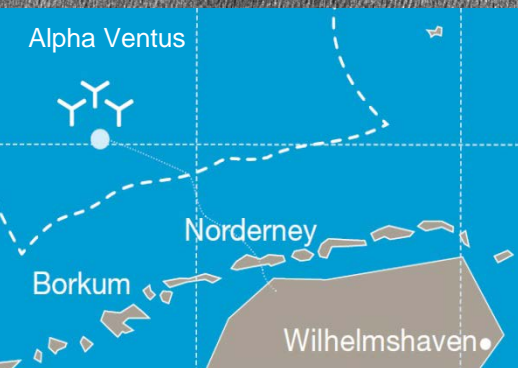
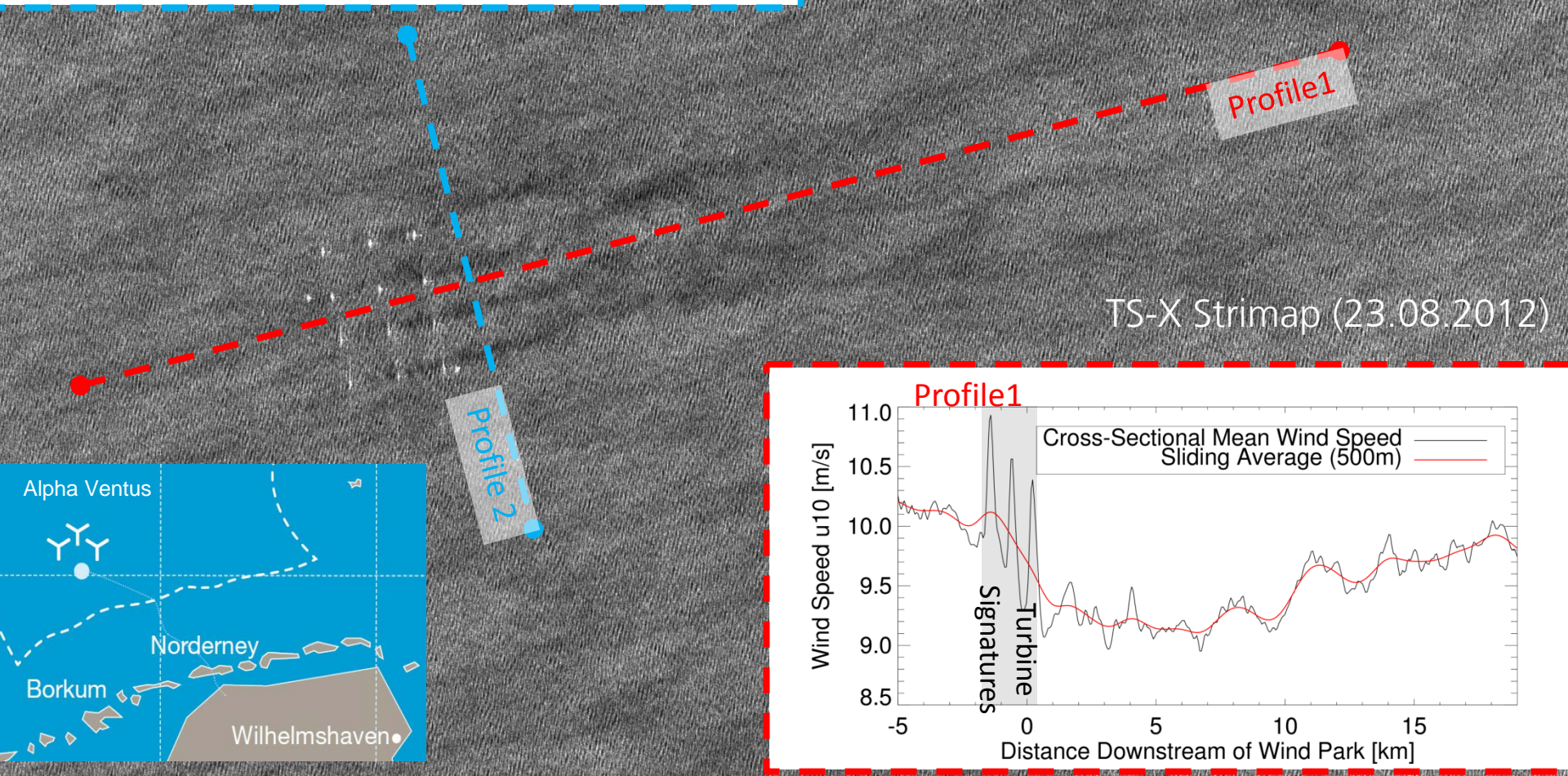
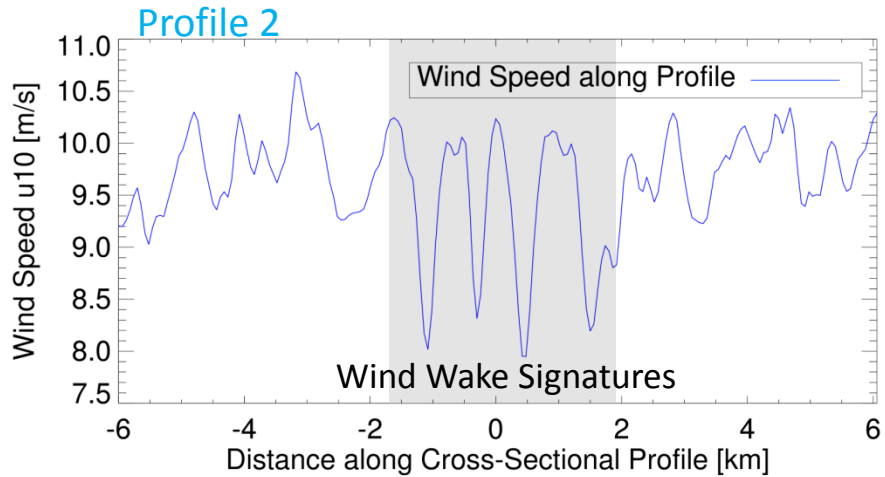


Maritime Copernicus Anwendungen: **Use-Case Windenergie**

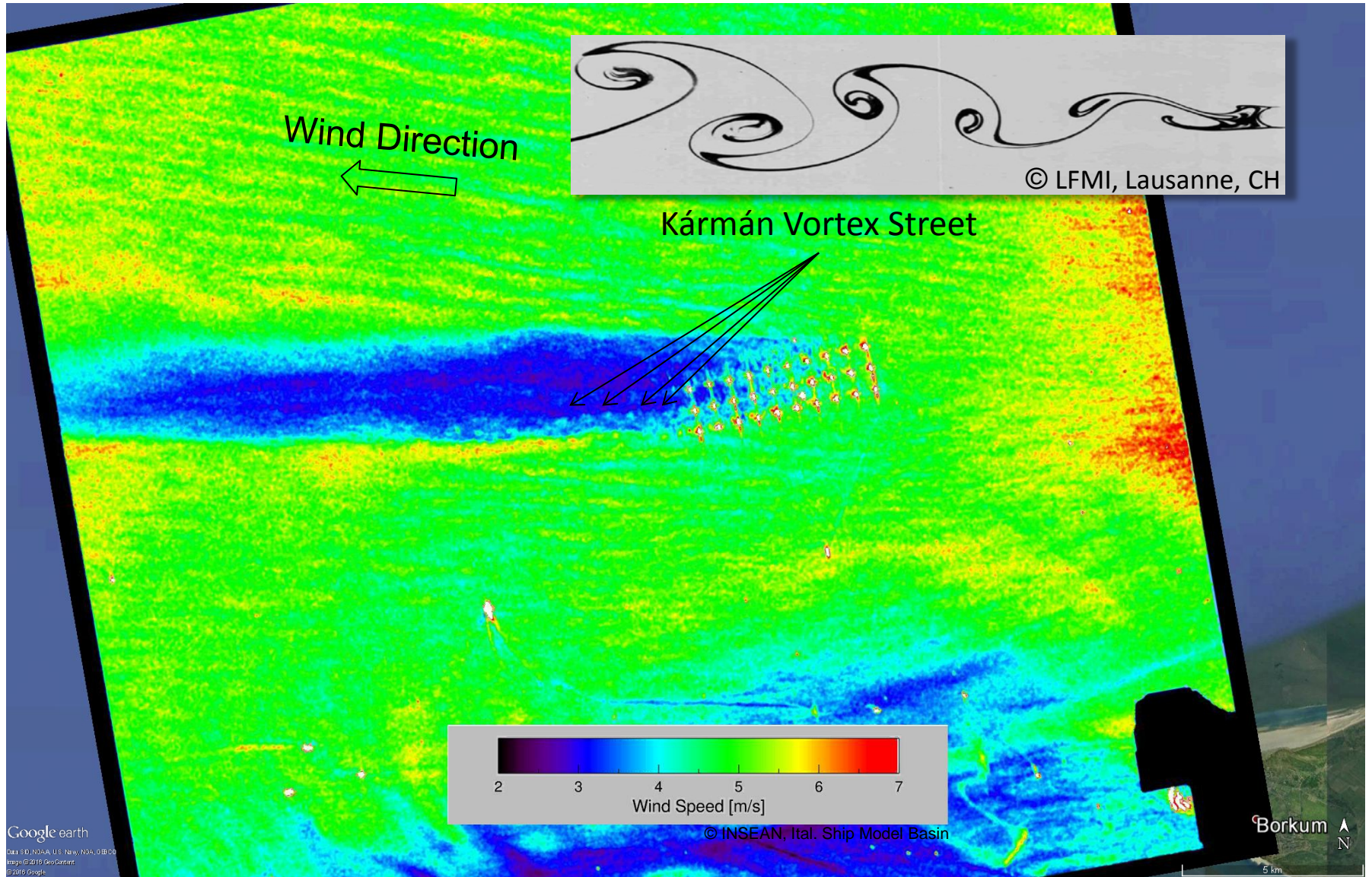
Dr. Sven Jacobsen
DLR Forschungsstelle Maritime Sicherheit, Bremen
Institut für Methodik der Fernerkundung

Knowledge for Tomorrow





TS-X StripMap (20150820); Riffgat Wind Park near Borkum

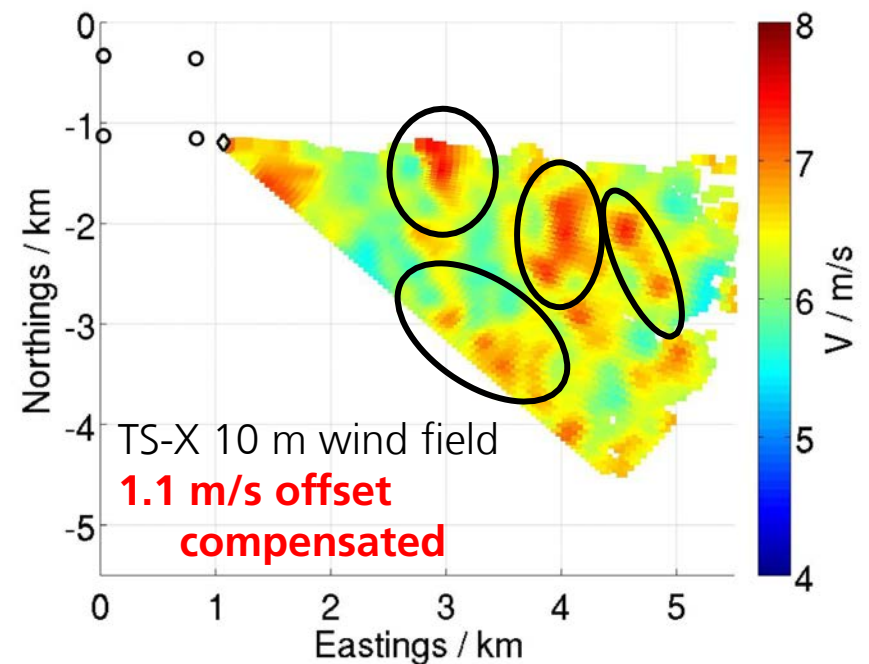
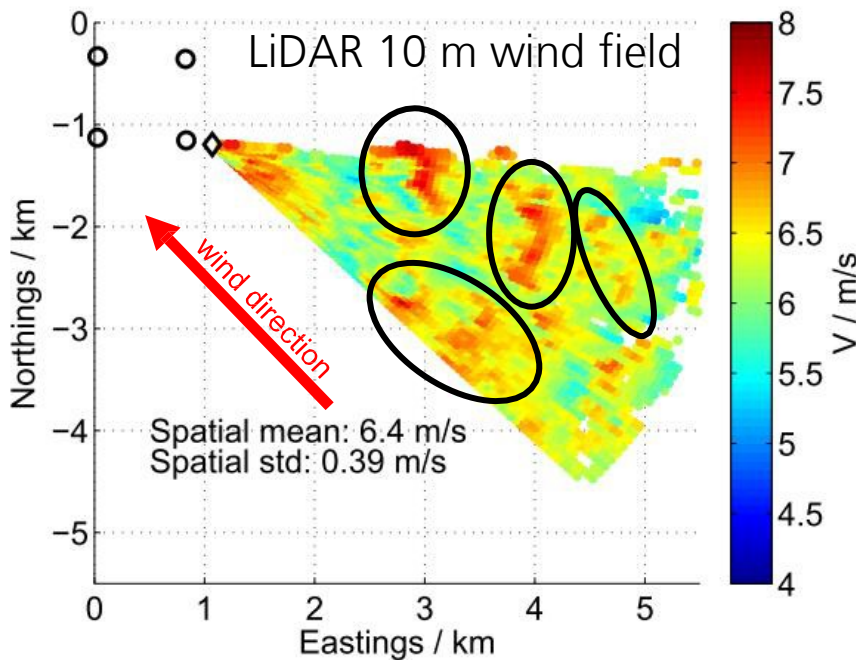
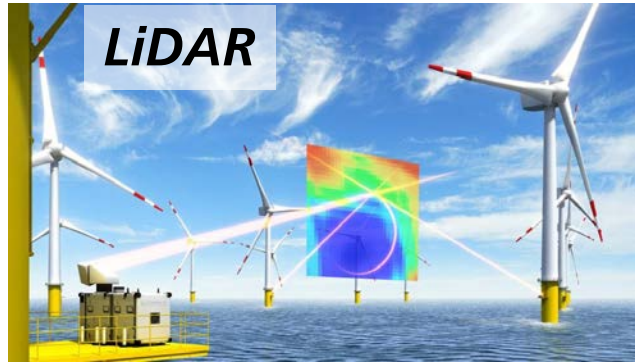


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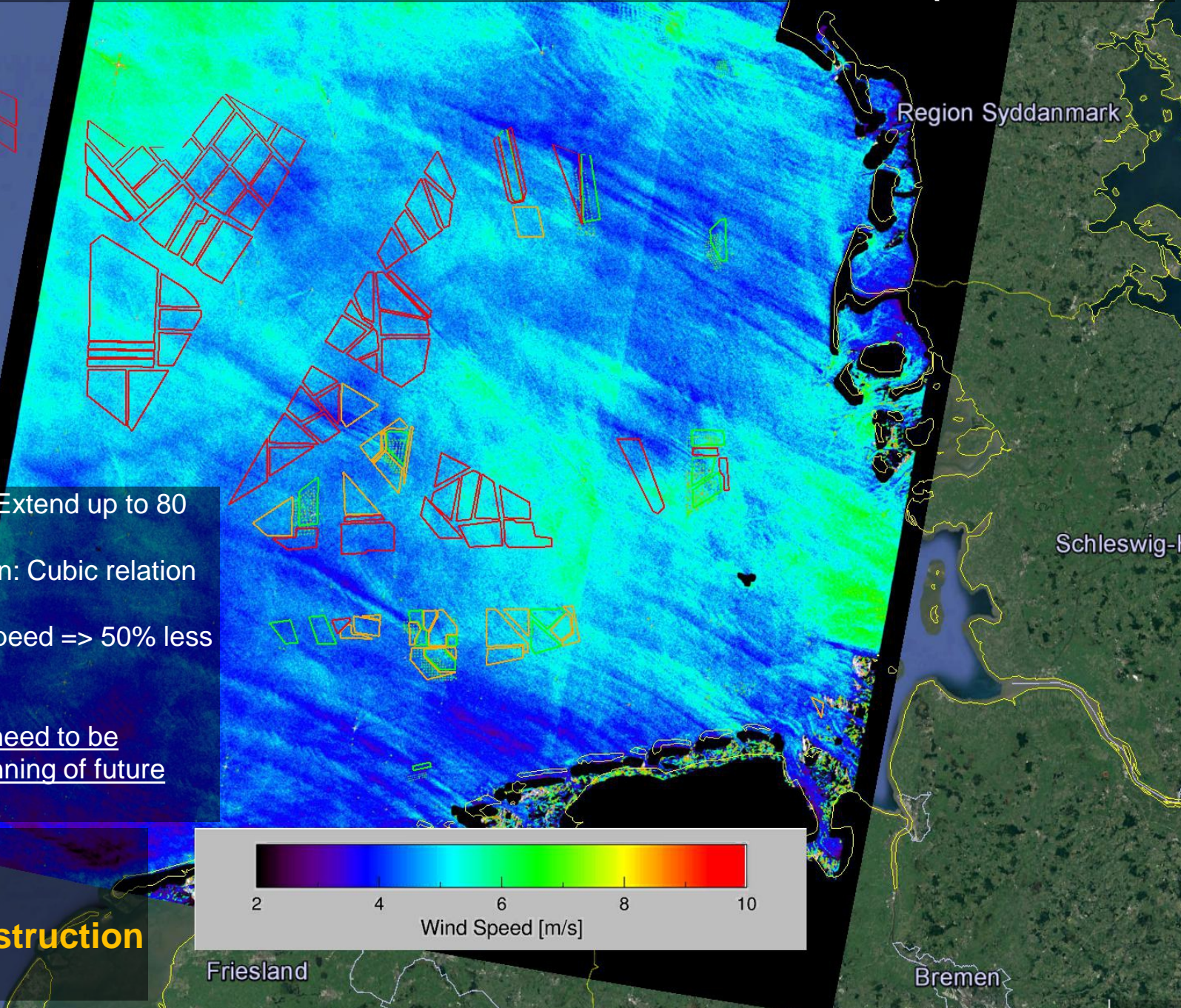
© INSEAN, Ital. Ship Model Basin



Comparison: Wind Fields From two Independent Methods



Operationeller NRT Wind Processor: SENTINEL-1 Wind Field (05.06. 2015)



- Wind Shadows: Extend up to 80 km
- Power Production: Cubic relation with wind speed
- 20% less wind speed => 50% less power harvest

➤ Wind shadows need to be regarded for planning of future wind parks

- Windparks:
- Built
 - Under Construction
 - Planned

