



WindSuite Project

Wind resource assessment and metocean analysis

Understanding the weather is the key to successful and profitable offshore wind projects. For more than 15 years StormGeo has been providing weather decision support for offshore and marine operations worldwide. Our WindSuite solutions have supported all phases of more than 30 offshore wind farms, helping stakeholders to ensure safe and cost-effective operations.

StormGeo's WindSuite Project uses advanced high-resolution weather modeling to help wind operators

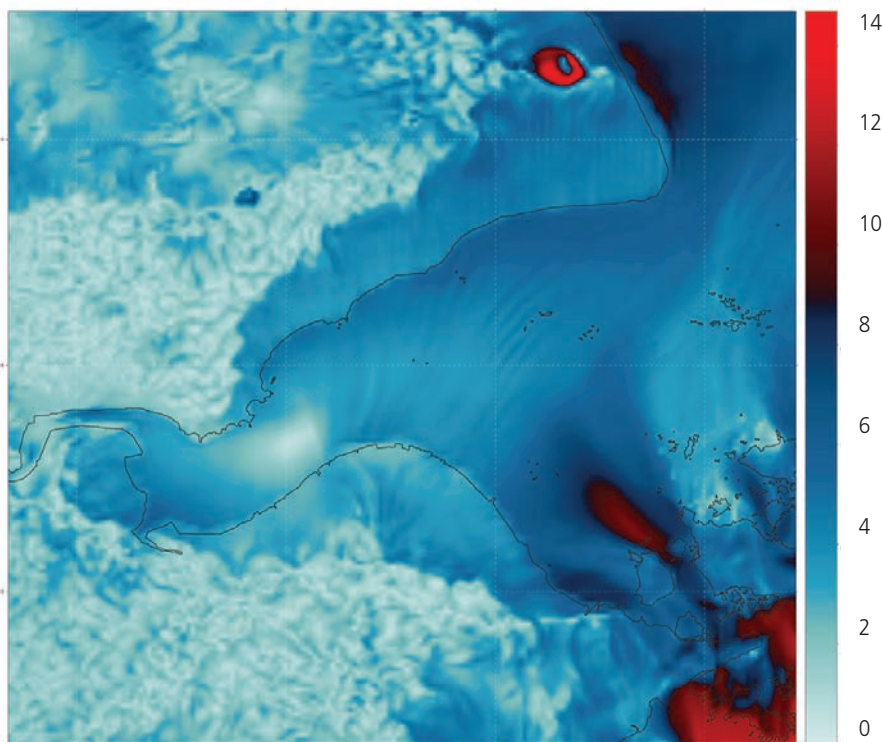
- Gain meteorological and oceanographic characteristics of the wind farm area
- Secure accurate estimates of power production

The Result

- Reduce project risks
- Ensure optimal planning for timely, safe and cost-efficient logistics solutions

Deliverables

- *Hindcast / Time Series*
- *Climate Data*
- *Wind Resource Assessment*
- *Extreme Value Analyses*
- *Statistical Reports*
- *Weather Window Studies*



1 km hindcast for the Bay of Hangzhou

The image is showing wind gust (10 m, m/s) at 2013-07-26 06:00 UTC. The red circle to the North-East are gusts associated with convection, while the red area located to the South-East is a low-level tip jets occurring as the airflow converges around Jintang Zhen and the Zhoushan Island. High-resolution forecasts and hindcasts are able to resolve local winds and turbulence important for wind power planning and operations.



WindSuite Works

Weather forecasting services for offshore wind

During the complex construction phase and the demanding operational phase of a wind farm, our **WindSuite Works** forecasting tool and services provide accurate forecasting to:

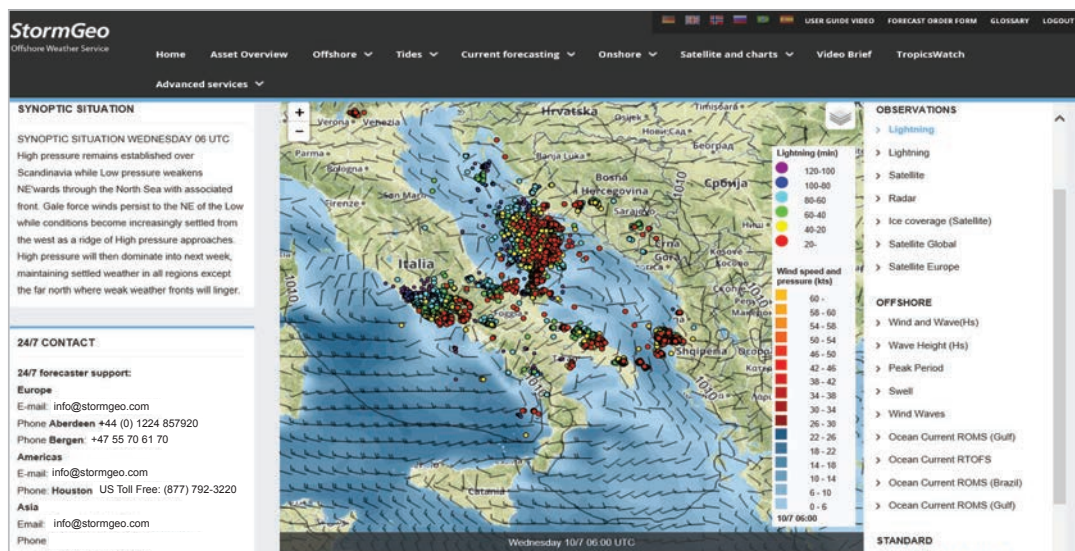
- ensure safe and effective operations
- minimize losses due to weather downtime
- avoid costly project delays

In addition to supervising the MetOcean environment on a 24/7 basis, StormGeo provides certified aviation forecasting services to help ensure safe helicopter operations and keep transit costs to a minimum.

Complementing these services, StormGeo's advanced vessel motion monitoring and prediction system assists vessel masters in avoiding detrimental vessel movements during transit and jacking operations on the offshore project site.

“ StormGeo's services play an important role in supporting our offshore transport and installation works, and we are very happy with the forecasts and the daily service that we get from StormGeo. ”

Marc Itgen
Manager, Offshore Logistics
Support Services
Vattenfall



WindSuite Works Web Portal
The overview page of the web portal presents a map with the forecast locations, overlaid on forecast charts that can be animated up to 10 days ahead, also including live lightning visualization (colored dots), radar images and satellite views. The chart allows zooming and panning.