

WindSuite Project

Wind Resource Assessment and Metocean Analysis

Understanding the weather is the key to a successful and profitable offshore wind project. For more than 15 years, StormGeo has provided weather decision support for offshore and marine operations worldwide. Our WindSuite solutions have supported all phases on more than 60 offshore wind farms, helping stakeholders ensure safe and cost-effective operations.

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

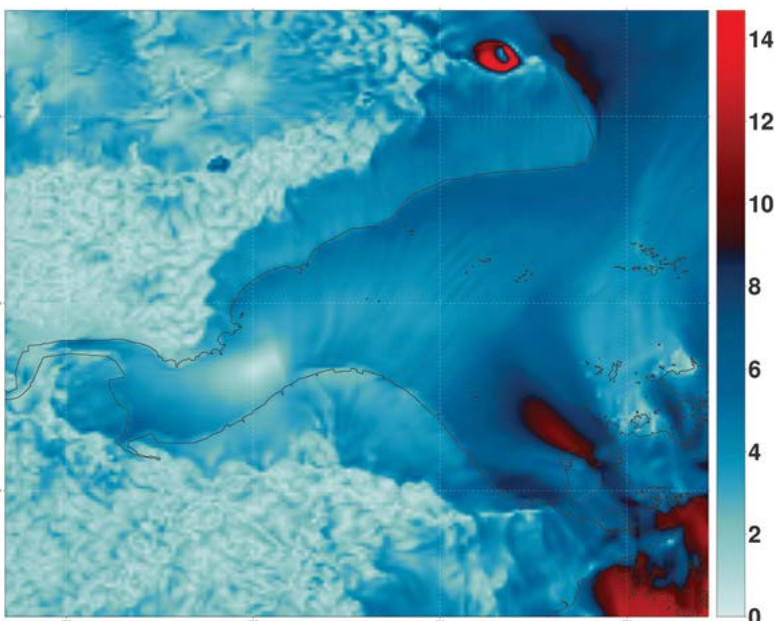
- Gain meteorological and oceanographic characteristics of the wind farm area
- Secure accurate estimates of power production

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
- Statistica Reports
- Weather Window Studies



1 km Hindcast for the Bay of Hangzhou

The image shows wind gust (10 m, m/s) on a particular date. 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 airow 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.

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—allowing crew to arrive safely and well-rested to site—as well as keeping 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.

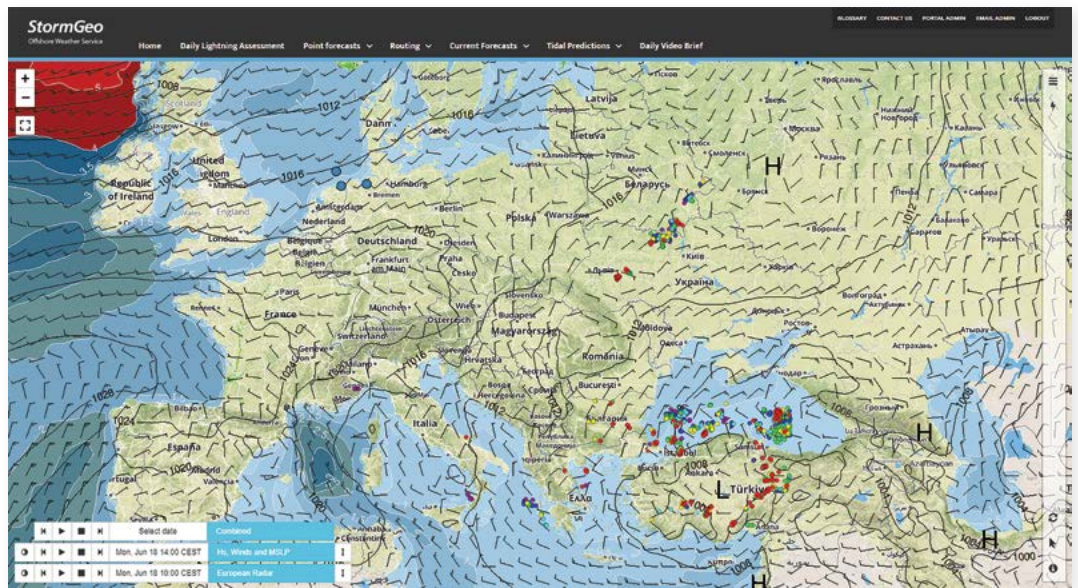


StormGeo’s services play an important role in supporting our offshore transport and installation works. We are very happy with the forecasts and the daily service that we get from StormGeo.”

Marc Itgen, Project Manager Maritime Logistics,
Senior Marine Lead, Vattenfall Europe Windkraft GmbH

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.



+ Get a free trial!

Ready to do business with a new type of weather company?

Contact info@stormgeo.com or visit stormgeo.com to sign up for a free trial of our solution.