

Wind energy services



Wind energy is one of the fastest growing and most volatile forms of electric power generation. Improved forecasting beyond the first two weeks of renewable power generation can improve the strategic and operational management of renewable power during the pre- and post-construction phases.

Summary

We are a trusted advisor and partner for wind users and investors, providing short term forecasts and seasonal predictions of the wind resource availability, which is directly linked to the energy yield of wind power plants. Our predictions represent the cutting-edge in climate modelling and the most robust climate information currently available. The numerical models applied have been scientifically developed and are endorsed by numerous scientific publications as well as success stories. We provide customized information that supports stakeholders to take more informed decisions allowing them to save time and money for wind energy.

Seasonal predictions have many potential applications for the wind energy sector. Identifying in advance periods of high and low wind power production helps to anticipate changes in energy supply and demand, which are essential to ensure the security of the energy network, and can help schedule traditional power plant operations and maintenance. Seasonal wind predictions are also appreciated for due diligence and for future planning and decision-making.

S2S4E - Climate Services for Clean Energy

EUPORIAS Climate Services

Objectives

There are two strategic services for the wind energy sector:

1. Short term forecast for wind energy
2. Seasonal predictions for wind energy

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

Source URL (retrieved on 2 oct 2023 - 06:33): <https://www.bsc.es/ca/research-development/research-areas/climate-prediction/wind-energy-services>